

# FLORA OF MUDUMALAI WILDLIFE SANCTUARY, TAMIL NADU<sup>1</sup>

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(With a map)

A floristic account of Mudumalai Wildlife Sanctuary which lies between 11°32'-11°43' N and 76°22'-76°45' E in the Nilgiri district of Tamil Nadu is given in this paper. A total of 506 taxa of flowering plants and ferns are reported from the sanctuary. Five species not reported by Gamble & Fischer (1915-1936) in the Flora of the Presidency of Madras have also been collected from this area. A map of the sanctuary is provided.

## INTRODUCTION

The creation of Wildlife Sanctuaries makes it possible to conserve the wild animals and plants thereby enabling the typical fauna and flora of India to be maintained to some extent. Mudumalai Wildlife Sanctuary lies between 11°32' and 11°43' N and 76°22' and 76°45' E and is situated along the eastern slopes of the Western Ghats. It forms the forest of the northern and north western side of the Nilgiri or Blue Mountains. The sanctuary is bounded on the north by the Bandipur National Park of Karnataka and on the west and south west by Kerala State (Map).

*Topography:* The sanctuary consists of undulating hills with elevations varying from 350 to 1250 m. Many streams drain the sanctuary, the principal ones being (1) Moyar which flows along the borders of Tamil Nadu and Karnataka (2) Benne Hole draining the western part of the sanctuary and (3) Biden Halla which flows into the Moyar. Moyar is

the most important source of water in the sanctuary, since most of the other streams dry up during the summer months.

*Geology and soil:* The rocks are of typical archaean biotite and hornblendic gneiss with intensive bands of charnokite and much younger biotite-granite, pegmatite and basic dolerite dykes. Two kinds of soil, namely black sandy loam and red heavy loam may be recognised in the area. The red soil is confined to the southern part of the sanctuary.

*Climate and rainfall:* The sanctuary is warmer than the rest of the area in the district. April, May and June are the hottest months and December and January are the coldest months. The rainfall varies greatly in different parts of the sanctuary. The western side receives more rainfall than the eastern part during the south-west monsoon period between June and September. In the eastern side most of the rainfall falls during the north-east monsoon period between October and December. The average annual rainfall is about 1420 m.

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VEGETATION

The vegetation varies in different parts of the sanctuary due to the variation in the extent of rainfall within the limits of the sanctuary and the period of its occurrence, and presents more luxuriance in October and November. Three main types of vegetation are met with: 1. Tropical moist deciduous, 2. Tropical dry deciduous and 3. Southern tropical thorn forest. In certain places mixed type of vegetation is noticed and demarcation between the first and second type and between the second and third type becomes difficult.

*Tropical moist deciduous:* In Benne block (western side of the sanctuary) this type of forest is encountered because of high rainfall when compared to the other blocks. *Bambusa arundinaceae* is common and characteristic of this type. The forest is leafless during the dry season in March-April though there is a good covering of evergreen species in the under-wood with shrubs such as *Toona ciliata*, *Euodia lunu-ankenda*, *Glochidion velutinum* and *Viburnum punctatum*. The prominent tree species which constitute the forest are: *Terminalia tomentosa*, *T. crenulata*, *T. bellerica*, *Schleichera oleosa*, *Butea monosperma*, *Linciera malabarica*, *Schrebera swietenoides* and *Pterocarpus marsupium*. The undergrowth consists of *Antidesma diandrum*, *Clerodendrum serratum*, *C. viscosum*, *Desmodium pulchellum*, *Flemingia strobilifera*, *F. wightiana* and *Callicarpa tomentosa*.

Due to the heavy rainfall and inadequate drainage, swamps are of frequent occurrence in this region.

*Tropical dry deciduous forest:* This type of forest is confined to the eastern side of the sanctuary. It is composed of trees, practically all of which are deciduous during the dry season. It merges gradually into thorn forests

wherever the rainfall is inadequate. *Anogeisus latifolia* is the dominant species. Other common tree species are: *Buchanania lanzan*, *Tectona grandis*, *Diospyros montana*, *Semecarpus anacardium*, *Givotia rottleriformis*, *Lannea coromandeliana*, *Dalbergia latifolia*, *Bombax ceiba*, *Madhuca indica*, *Gmelina arborea*, *Mitragyna parvifolia* and *Wrightia tinctoria*. Some of the shrubs and climbers worthy of mention are *Carissa carandas*, *Maytenus emarginata*, *Scutia myrtina*, *Argyrea cuneata*, *Ventilago maderaspatana* and *Hiptage benghalensis*.

Grasses like *Heteropogon contortus* and *Themeda cymbaria* come up after the rains and give good grazing for wild animals. *Habenaria plantaginea*, a terrestrial orchid, is found in association with *Themeda cymbaria*. The forest fires begin in February and burn the grasses over extensive areas till the dry spell ends in April.

*Southern tropical thorn forest:* This type of forest also known as scrub jungle is dominated by *Acacia* spp. Sometimes elements of dry deciduous type are also mixed up in this forest and hence a clear demarcation cannot be made here. However, the predominance of thorny species together with plants of fleshy nature, both of which are xerophytic adaptations, are characteristics of this vegetation. Parts of Avarihalla, Moyar and Bokkapuram reserves constitute this type. The floristic constituents are: *Acacia chundra*, *A. leucophloea*, *Albizzia amara*, *Canthium parviflorum*, *Xeromphis spinosa*, *Zizyphus oenoplia*, *Capparis grandiflora*, *C. sepiaria*, *Barleria buxifolia*, *B. mysorensis* and *B. prionitis*.

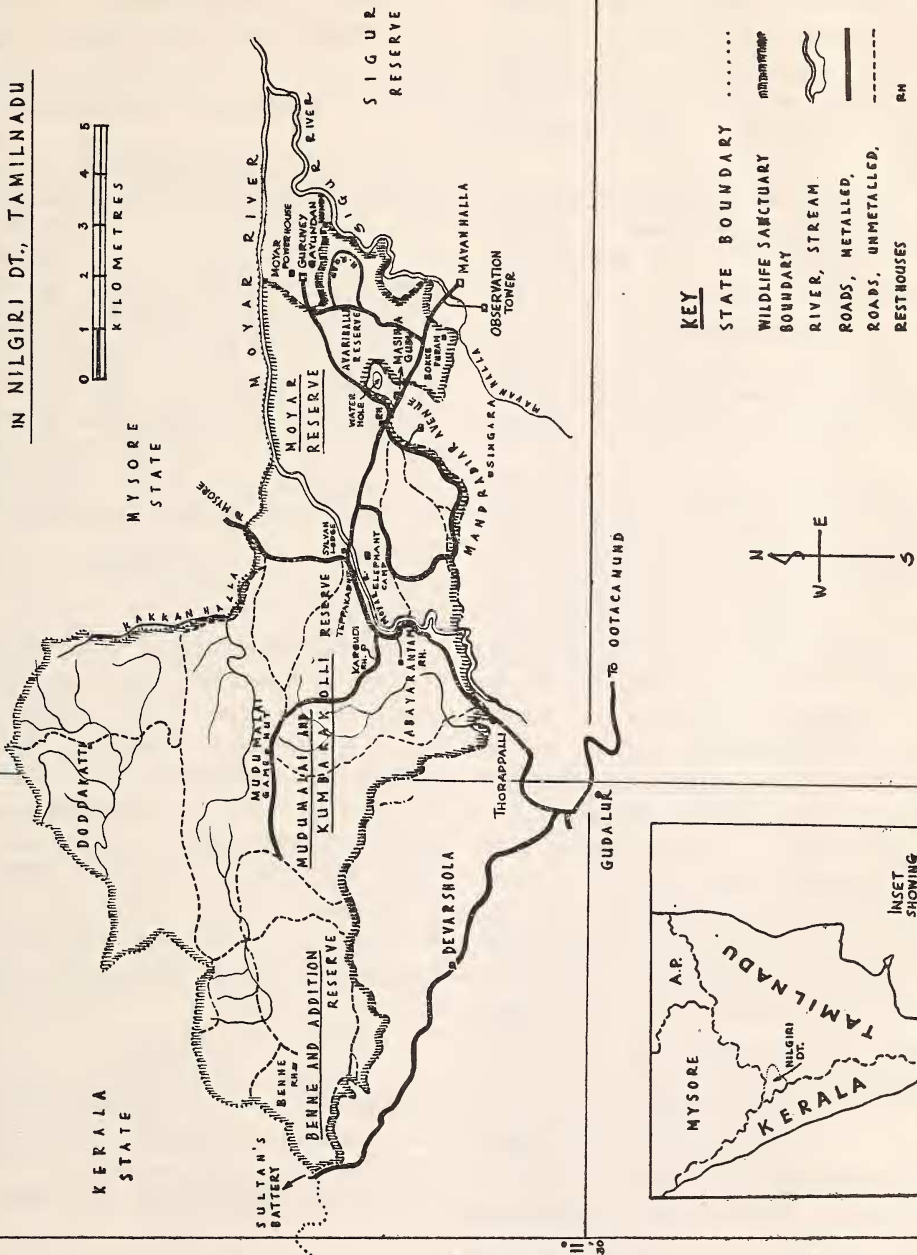
Succulents like *Opuntia dillenii* and *Caraluma adscendens* are common in the open forests.

On the banks of Moyar and along the streams, narrow strips of riverine vegetation

FLORA OF MUDUMALAI SANCTUARY

**MUDUMALAI WILDLIFE SANCTUARY**

IN NILGIRI DT., TAMILNADU



**KEY**

- STATE BOUNDARY .....
- WILDLIFE SANCTUARY BOUNDARY - - - - -
- RIVER, STREAM ~~~~~
- ROADS, METALLED, ———
- ROADS, UNMETALLED, - - - - -
- REST HOUSES RH



76° 30'

Map. Mudumalai Wildlife Sanctuary in Nilgiri District, Tamil Nadu.

is noticed. The prominent species are *Lino-ciera malabarica*, *Salix tetrasperma*, *Bischofia javanica*, *Terminalia arjuna*, *Vitex altissima*, *Diospyros peregrina*, *D. assimilis*, *Drypetes roxburghii*, *Memecylon edule* and *Mallotus muricatus*. *Homonoia riparia*, a rheophytic shrub, is well adapted to water currents in Moyar river.

Almost the entire sanctuary is exploited for forest produce. It supports a number of Teak plantations, particularly in the Benne Block and plantation of *Eucalyptus* is found in Masinagudi area. Bamboo plantation for rayon mills in Kerala has also gained importance during the last few years. The timber extraction includes both clear felling and selective cuttings.

The minor forest produce includes wild honey, bees wax, bark lichen, soapnut, tamarind, gallnut for medicinal use from *Terminalia chebula* and *T. bellerica*, antlers, etc.

Mudumalai sanctuary, like many other sanctuaries in India, suffers from human interference. Some of the contributing factors are population pressure, denudation of forests, disturbance of the natural condition by the plantation of blue gum, wattles and other such exotics, use of insecticides, excessive cattle grazing which leads to soil erosion and the passing of unhealthy cattle through the sanctuary, etc. During one of our visits a big fair was in progress inside the sanctuary at the Bokkapuram Temple which is said to be an annual feature. This must certainly be a great source of annoyance and disturbance to the wildlife.

Keeping all these factors in mind it was decided to record the floral wealth of the sanctuary before it is adversely affected by man. It would be worthwhile to establish collaboration between the botanists and zoologists to

establish as to which floristic and faunistic constituents are utilized by the wildlife for their needs, so that managerial practices could be orientated in the best interest of the wildlife.

#### BOTANICAL EXPLORATION

The earliest plant collections from the Mudumalai Wildlife Sanctuary area were made by R. H. Beddome, M. A. Lawson, C. A. Barber, J. S. Gamble and G. V. Narayana and S. R. Raju. K. Subramanyam in 1956 made collections in Benne block under the auspices of the Botanical Survey of India. The recent explorations, based on which this paper has been written, were undertaken between 1970 and 1973 by B. D. Sharma, B. V. Shetty, K. Vivekananthan and N. C. Rathakrishnan in eight field trips. Sporadic collections of N. P. Balakrishnan are also included. The collections are deposited in the Madras Herbarium, Coimbatore (MH).

This enumeration paper deals with 693 field numbers of flowering plants and ferns. It includes 506 vascular plants belonging to 328 genera spread over 98 families. The families of flowering plants are arranged according to Bentham & Hooker's Classification with certain exceptions to accommodate recent changes in the delimitation of families. Ferns are arranged based on the system followed by Bir & Vasudeva (1971) and Holttum (1954). Genera and species are arranged under their respective families in an alphabetical order. The currently valid names are given and wherever necessary the synonyms appearing in Gamble's Flora are given below. New records not reported by Gamble & Fischer (1915-1936) in the FLORA OF THE PRESIDENCY OF MADRAS are marked with an asterisk.

FLORA OF MUDUMALAI SANCTUARY

DICOTYLEDONS

ANNONACEAE

- Uvaria narum* (Dunal) Wt. & Arn.  
Scandent shrub with yellow fls., rare.  
Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma* 35450.

MENISPERMACEAE

- Cissampelos pareira* Linn. var. *hirsuta* (Buch.-Ham. ex DC.) Forman  
*C. pareira* Linn.  
Climber with greenish yellow fls., common.  
Doddagatti, 900 m, 23-6-1970, *Shetty* 34349; Circular road, 900 m, 24-6-1970, *Shetty* 34385; Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35405.

CRUCIFERAE (BRASSICACEAE)

- Coronopus didymus* (Linn.) Sm.  
*Senebiera didyma* Pers.  
Small herb with white fls., occasional.  
Benne, 1200 m, 19-1-1961, *Shetty* 11933.

CAPPARACEAE

- Capparis grandiflora* Wall. ex Hook. f. & Thoms.  
Shrub with white or yellow fls., occasional.  
Bokkapuram R.F., 925 m, 17-4-1971, *Rathakrishnan* 37924.

- C. sepiaria* Linn.  
Large straggling shrub in frs., common.  
Avarihalla R.F., 950 m, 18-8-1970, *Sharma* 35611.

- Cleome felina* Linn. f.  
Annual erect herb with pink fls., occasional.  
Moyar bank, 525 m, 23-11-1971, *Rathakrishnan* 38999.

- C. monophylla* Linn.  
Erect herb with purple fls., occasional.  
Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35404.

VIOLACEAE

- Hybanthus enneaspermus* (Linn.) F.V. Muell.  
*Ionidium suffruticosum* Ging.  
Perennial woody undershrub with red fls., common.  
Moyar bank, 550 m, 22-8-1970, *Sharma* 35722.

BIXACEAE

- Cochlospermum religiosum* (Linn.) Alston.

- C. gossypium* DC.  
Deciduous tree with golden yellow fls., rare.  
Moyar bank, 550 m, 16-2-1972, *Sharma* 39820.

FLACOURTIACEAE

- Flacourtia ramontchii* L'Herit.  
Shrub with yellow fls., occasional.  
Moyar R.F., 925 m, 15-2-1972, *Sharma* 39804.

PITTOSPORACEAE

- Pittosporum floribundum* Wt. & Arn.  
Small tree with yellow fls., & frs., rare.  
Theppakadu, 850 m, 27-10-1972, *Vivekananthan* 43091.

POLYGALACEAE

- Polygala chinensis* Linn.  
Prostrate herb with greenish yellow fls., & frs., common.  
Mudumalai R.F., 900 m, 24-6-1970, *Shetty* 34388;  
Moyar R.F., 900 m, 18-8-1970, *Sharma* 35584.

- P. elongata* Klein. ex Willd.  
Annual herb with yellow fls., occasional.  
Doddagatti, 900 m, 23-6-1970, *Shetty* 34358.  
*P. rosmarinifolia* Wt. & Arn.  
Annual herb, rare.  
Masinagudi, 950 m, November 1884, *Gamble* 15413.

CARYOPHYLLACEAE

- Drymaria cordata* Willd. ex Roem. & Schult.  
Diffuse herb, common.  
Theppakadu, 850 m, Nov. 1889, *Lawson* s.n. (MH 2649).

DIPTEROCARPACEAE

- Shorea talura* Roxb.  
Tree in fls., very rare.  
Mudumalai R.F., 900 m, *Beddome* s.n. (MH 3419).

MALVACEAE

- Abelmoschus angulosus* Wall. ex Wt. & Arn.  
*Hibiscus abelmoschus* Linn.  
Herb in frs., occasional.  
Moyar R.F., 900 m, 18-8-1970, *Sharma* 35588.  
*Bombax ceiba* Linn.  
*B. malabaricum* DC.  
Large tree with scarlet fls., rare.

Theppakadu, 900 m, August 1886, *Gamble* 17870;  
Moyar R.F., 925 m, 15-2-1972, *Sharma* 39806.

*Hibiscus lunarifolius* Willd.

Erect herb with yellow fls., occasional.

Kargudi, 975 m, 28-10-1972, *Vivekananthan*  
43101.

*H. ovalifolius* (Forsk.) Vahl

*H. micranthus* L.f.

Shrub with white fls., common.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35720,  
19-4-1971, *Rathakrishnan* 37959.

*H. lobatus* (J. A. Murray) O. Ktze.

*H. solandra* L'Herit.

Erect herb with yellow fls. & frs., common.

Mudumalai-Kargudi, 800 m, 23-9-1928, *Narayana*  
& *Raju* 18316; Northern Hay R.F., 950 m, 15-8-  
1970, *Sharma* 35497.

*Kydia calycina* Roxb.

Tree with white fls., common.

Kargudi, 975 m, 28-10-1972, *Vivekananthan*  
43099.

*Sida acuta* Burm. f.

Undershrub with yellow fls. & frs., common.

Benne, 1000 m, 19-7-1960, *Subramanyam* 10475.

*S. glutinosa* Comm. ex Cav.

Undershrub with orange fls., occasional.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35597.

*S. orientalis* Cav.

Shrub in fls., occasional.

Theppakadu, 850 m, 25-10-1972, *Vivekananthan*  
43051.

*Thespesia lampas* (Cav.) Dalz. & Gibs.

*Hibiscus lampas* Cav.

Undershrub with yellow fls., rare.

Benne, 900 m, November 1886, *Gamble* 18367;  
Biralal, 850 m, 26-10-1972, *Vivekananthan* 43080.

*Urena sinuata* Linn.

Undershrub with pink fls., common.

Moyar bank, 525 m, 23-11-1971, *Rathakrishnan*  
38986.

#### STERCULIACEAE

*Byttneria herbacea* Roxb.

Herb with purple fls., common.

Mudumalai, 850 m, 24-6-1970, *Shetty* 34402.

*Eriolaena quinquelocularis* (Wt. & Arn.) Wt.

Small tree with yellow fls., rare.

Mudumalai, 900 m, 24-6-1970, *Shetty* 34386;  
Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma*  
35447.

*Helicteres isora* Linn.

Shrub with red fls., common.

Mudumalai, 1100 m, 20-7-1960, *Subramanyam*  
10492; Northern Hay R.F., 950 m, 15-8-1970, *Shar-*  
*ma* 35493.

*Sterculia urens* Roxb.

Tree with reddish-brown fls. & frs., occasional.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35571.

*S. villosa* Roxb.

Tree with yellow fls., streaked with pink, occa-  
sional.

Mudumalai, 850 m, February 1887, *Gamble* s.n.  
(MH 4740).

*Waltheria indica* Linn.

Undershrub with yellow fls., common.

Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma*  
35406.

#### TILIACEAE

*Grewia abutilifolia* Vent. ex Juss.

*G. aspera* Roxb.

Shrub with white fls. & frs., common.

Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma*  
35385; Theppakadu, 850 m, 9-4-1972, *Vivekanan-*  
*than* 40764 & 25-10-1972, *Vivekananthan* 43054.

*G. disperma* Rottl. ex Spr.

Shrub with yellow fls., occasional.

Northern Hay R.F., 950 m, 16-8-1970, *Sharma*  
35524.

*G. hirsuta* Vahl

Shrub with white fls. & frs., very common.

Mudumalai, 1100 m, 20-7-1960, *Subramanyam*  
10487; Doddagatti, 900 m, 23-6-1970, *Shetty* 34359;  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma*  
35399; Theppakadu, 850 m, 25-10-1972, *Vivekanan-*  
*than* 43061.

*G. orbiculata* Rottl.

*G. rotundifolia* Juss.

Small tree with yellow fls., occasional.

Moyar R.F., 925 m, 21-4-1971, *Rathakrishnan*  
38016.

*G. tiliifolia* Vahl.

Small tree with yellow fls. & frs., common.

Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma*  
35446; Avarihalla R.F., 925 m, 21-4-1971, *Ratha-*

FLORA OF MUDUMALAI SANCTUARY

*krishnan* 38030; Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40769.

*Triumfetta rhomboidea* Jacq.

Herb with yellow fls. & frs., common.  
Theppakadu, 850 m, 25-10-1972, *Vivekananthan* 43067.

LINACEAE

*Erythroxylon monogynum* Roxb.

Small tree with white fls., occasional.  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35387.

MALPIGHIACEAE

*Hiptage benghalensis* (Linn.) Kurz

*H. madablota* Gaertn.  
Straggling shrub with fragrant white fls., occasional.  
Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma* 35445.

OXALIDACEAE

*Biophytum reinwardtii* (Zucc.) Klotch.

Small herb with white yellow fls. & frs., common.  
Theppakadu, 850 m, 25-10-1972, *Vivekananthan* 43060.

*B. sensitivum* (Lin.) DC. var. *candolleianum* (Wt.) Edgew. & Hook f.

*B. candolleianum* Wt.  
Small herb with yellow fls., common  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35391.

*Oxalis corniculata* Linn.

Small herb with yellow fls., rare.  
Mudumalai, 1100 m, 20-7-1960, *Subramanyam* 10493.

BALSAMINACEAE

*Impatiens chinensis* Linn.

Annual herb in fls. & frs., rare.  
Benne, 1000 m, 19-7-1960, *Subramanyam* 10477.

RUFACEAE

*Atalantia racemosa* Wt. & Arn.

Small tree with white fls., common.  
Moyar bank, 550 m, 16-2-1972, *Sharma* 39813.

*Chloroxylon swietenia* DC.

Small tree with white fls., common.  
Moyar R.F., 925 m, 21-4-1971, *Rathakrishnan*

38018; Avarihalla R.F., 900 m, 20-2-1972, *Sharma* 39864.

*Euodia lunu-ankenda* (Gaertn.) Merr.

Small tree with white fls., common.  
Benne, 1030 m, 18-7-1960, *Subramanyam* 10437.

*Feronia limonia* (Linn.) Swingle

*Limonia crenulata* Roxb.  
Small tree in frs., occasional.  
Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38924.

*Toddalia asiatica* (Linn.) Lamk. var. *gracilis*

Gamble  
Climbing shrub with white fls., common.  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35386.

BURSERACEAE

*Commiphora caudata* (Wt. & Arn.) Engl.

Tree in frs., common.  
Moyar R.F., 900 m, 17-8-1970, *Sharma* 35565.

*Garuga pinnata* Roxb.

Tree with yellow fls. & frs., common.  
Doddagatti-Kargudi, 900 m, 23-6-1970, *Shetty* 34375; Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35413; Moyar R.F., 550 m, 16-2-1972, *Sharma* 39821; Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40760.

MELIACEAE

*Aglaiia elaeagnoidea* (Juss.) Benth.

*A. roxburghiana* Hiern.  
Small tree with pale yellow fls., rare.  
Moyar bank, 550 m, 22-8-1970, *Sharma* 35709.

*Chukrasia tabularis* A. Juss.

Large tree with white fls., rare.  
Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40762.

*Cippadessa baccifera* (Roth) Miq.

Shrub in frs., occasional.  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35382.

*Soyimida febrifuga* (Roxb.) A. Juss.

Large tree in frs., common.  
Moyar bank, 600 m, 19-4-1971, *Rathakrishnan* 37978.

*Toona ciliata* Roem.

*Cedrela toona* Roxb.  
Large tree in frs., rare.

Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40777.

OLACACEAE

*Oxalis scandens* Roxb.

Climbing shrub in frs., common.

Bokkapuram R.F., 1000 m, 13-8-1970, *Sharma* 35436.

OPILIACEAE

*Cansjera rheedii* Gmel.

Climbing shrub with pale green fls., very common.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35728 & 23-11-1971, *Rathakrishnan* 38983.

*Opilia amentacea* Roxb.

Climbing shrub with pale green fls., common.

Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37968.

AQUIFOLIACEAE

*Ilex malabarica* Bedd.

Tree in fls., rare.

Mudumalai, 900 m, *Beddome* s.n. (MH 9757).

CELASTRACEAE

*Celastrus paniculatus* Willd.

Climbing shrub in frs., very common.

Bokkapuram R.F., 1000 m, 13-8-1970, *Sharma* 35434.

*Elaeodendron paniculatum* Wt. & Arn.

Small tree with greenish yellow fls., common.

Avarihalla R.F., 900 m, 20-2-1972, *Sharma* 39866.

*E. roxburghii* Wt. & Arn.

*E. glaucum* auct. non Pers.

Small tree with yellow fls., common.

Bokkapuram R.F., 1000 m, 13-8-1970, *Sharma* 35435; Moyar bank, 600 m, 17-4-1971, *Rathakrishnan* 37975.

*Maytenus emarginata* (Willd.) Ding Hou

*Gymnosporia montana* Benth.

Small tree with white fls., common.

Moyar bank, 525 m, 23-11-1971, *Rathakrishnan* 38994; Moyar R.F., 925 m, 15-2-1972, *Sharma* 39801.

*Pleurostyliea opposita* (Wall.) Alston

*P. wightii* Wt. & Arn.

Small tree in frs., common.

Masinagudi, 900 m, August 1886, *Gamble* 17910; Moyar bank, 550 m, 22-8-1973, *Sharma* 35715.

HIPPOCRATEACEAE

*Loeseneriella pauciflora* (DC.) A. C. Smith

*Hippocratea obtusifolia* Roxb.

Climbing shrub with yellow fls., occasional.

Moyar bank, 525 m, 23-11-1971, *Rathakrishnan* 38982 & 16-2-1972, *Sharma* 39810.

RHAMNACEAE

*Scutia myrtina* (Burm. f.) Kurz

Straggling shrub with pale green fls., common.

Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35415; Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38920.

*Zizyphus oenoplia* Mill.

Straggling shrub with greenish yellow fls. & frs., common.

Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35378; Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35537; Biralal, 850 m, 26-10-1972, *Vivekananthan* 43077.

*Z. xylopyrus* (Retz.) Willd.

Small tree with yellow fls. & frs., common.

Bokkapuram R.F., 1000 m, 13-8-1970, *Sharma* 35438; Moyar R.F., 925 m, 21-4-1971, *Rathakrishnan* 38020; Mudumalai, 900 m, 11-4-1972, *Vivekananthan* 40789.

VITACEAE

*Ampelocissus araneosa* Planch.

Climbing shrub in frs., occasional.

Northern Hay R.F., 950 m, 16-8-1970, *Sharma* 35522.

*Cissus discolor* Bl.

Climber in fls., occasional.

Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10394.

*C. gigantea* (Bedd.) Planch.

Climbing shrub in frs., rare.

Theppakadu, 950 m, August 1886, *Lawson* s.n. (MH 11263).

*C. glauca* Roxb.

Climbing shrub with pink fls., common.

Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37965 & 16-2-1972, *Sharma* 39812.

*C. quadrangularis* Linn.

Climbing shrub with yellow fls., very common.



FLORA OF MUDUMALAI SANCTUARY

Moyar R.F., 925 m, 21-4-1971, *Rathakrishnan* 38022. Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40756; Kargudi, 950 m, 12-4-1972, *Vivekananthan* 40802.

*C. pallida* (Wt. & Arn.) Planch.

Erect shrub in frs., rare.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35574.

*Leea crispa* Linn.

Shrub in greenish fls., occasional.

Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35533.

*L. edgeworthii* Santapau

*L. aspera* Edgew.

Undershrub in fls., common.

Benne R.F., 1000 m, 19-7-1960, *Subramanyam* 10474; Doddagatti, 900 m, 23-6-1970, *Shetty* 34353.

SAPINDACEAE

*Allophylus rheedii* (Wt.) Radlk.

Large shrub in fls., common.

Benne R.F., 850 m, 27-6-1970, *Shetty* 34434.

*A. serratus* (Roxb.) Kurz

Small tree with white fls., common.

Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35421; Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35521.

*A. serrulatus* (Wt.) Radlk.

Small tree in fls., occasional.

Bokkapuram, 1000 m, August 1886, *Gamble* 17943.

*Cardiospermum canescens* Wall.

Climbing herb with white fls., common.

Masinagudi, 1000 m, November 1886, *Gamble* 18457.

*Filicium decipiens* (Wt. & Arn.) Thw.

Tree with greenish buds, rare.

Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35416.

*Sapindus emarginatus* Vahl

Tree with white fls., occasional.

Masinagudi, 1000 m, August 1886, *Gamble* 17969.

*S. laurifolius* Vahl

Tree with yellow fls., occasional.

Avarihalla R.F., 910 m, 2-11-1971, *Rathakrishnan* 38916.

*Schleichera oleosa* (Lour.) Oken.

*S. trijuga* Willd.

Large tree in frs., common.

Mudumalai, 1100 m, *Gamble* s.n. (MH 11613);

ANACARDIACEAE

*Lannea coromandelica* (Houtt.) Merr.

*Odina wodier* Roxb.

Small tree with yellowish green fls., & frs., occasional.

Theppakadu 850 m, August 1886, *Lawson* s.n. (MH 12104); Moyar bank, 530 m, 16-2-1972, *Sharma* 39818.

*Mangifera indica* Linn.

Tree along riverside in frs., occasional.

Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40750.

*Rhus mysorensis* G. Don.

Small tree with yellow fls., & frs., common.

Moyar bank, 525 m, 23-11-1971, *Rathakrishnan* 38993 & 16-2-1972, *Sharma* 39819.

*Semecarpus anacardium* Linn. f.

Tree with greenish yellow fls. & frs., very common.

Mudumalai, 1100 m, November 1886, *Gamble* 17961; Moyar R.F., 900 m, 17-8-1970, *Sharma* 35577; Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38927.

PAPILIONACEAE

*Alysicarpus bupleurifolius* (Linn.) DC.

Herb with light pink fls., common.

Moyar R.F., 900 m, 18-8-1870, *Sharma* 35582.

*A. monilifer* (Linn.) DC.

Prostrate herb with pink fls., common.

Theppakadu, 850 m, 25-10-1972, *Vivekananthan* 43066.

*Atylosia scarabaeoides* (Linn.) Benth.

Twining herb with yellow fls. & frs., common.

Moyar R.F., 925 m, 15-2-1972, *Sharma* 39803; Mudumalai, 850 m, 27-10-1972, *Vivekananthan* 43095.

*Butea monosperma* (Lamk.) Taub.

Small tree with red fls. & frs., common.

Benne, 1125 m, 21-1-1961, *Shetty* 11959; Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40761.

*Crotalaria calycina* Schrank

Herb with pale yellow fls., occasional.

Theppakadu, 850 m, November 1886, *Gamble* 18372.

- C. dubia* Grah. ex Benth.  
Undershrub with fls. and frs. occasional.  
Benne, 1125 m, November 1884, *Gamble* 15329,  
21-1-1961, *Shetty* 11957.
- C. laevigata* Lamk.  
Shrub with yellow fls., occasional.  
Theppakadu, 850 m, 25-10-1972, *Vivekananthan*  
43050.
- C. medicaginea* Lamk. var. *neglecta* (Wt. & Arn.)  
Baker  
*C. medicaginea* Lamk.  
Herb with yellow fls., occasional.  
Theppakadu, August 1886, *Lawson* s.n.  
(MH 13271).
- C. mysorensis* Roth  
Herb in frs., common.  
Moyar R.F., 900 m, 18-8-1970, *Sharma* 35596.
- C. pallida* Ait.  
*C. striata* DC. var. *acutifolia* Trim.  
Shrub with yellow fls., common.  
Moyar bank, 525 m, 23-11-1971, *Rathakrishnan*  
38980.
- C. verrucosa* Linn.  
Shrub with pale blue fls., common.  
Moyar bank, 525 m, 23-11-1971, *Rathakrishnan*  
38996.
- C. walkeri* Arn.  
Undershrub with yellow fls. & frs., common.  
Benne, 1125 m, 19-1-1961, *Shetty* 11932.
- Dalbergia lanceolaria* Linn. f.  
Medium-sized tree in frs., common.  
Bokkapuram R.F., 1000 m, 13-8-1970, *Sharma*  
35441.
- D. latifolia* Roxb.  
Medium-sized tree with white fls., common.  
Avarihalla R.F., 950 m, 19-8-1970, *Sharma* 35620;  
Bokkapuram R.F., 1000 m, 13-8-1970, *Sharma* 35442.
- D. paniculata* Roxb.  
Medium-sized tree in frs., occasional.  
Moyar R.F., 900 m, 17-8-1970, *Sharma* 35569.
- Derris indica* (Lamk.) Bennet  
*Pongamia pinnata* (Linn.) Pierre  
Small tree with pinkish fls. & frs., common.  
Moyar bank, 550 m, 22-8-1970, *Sharma* 35723;  
Theppakadu, 850 m, 9-4-1972, *Vivekananthan*  
40743.
- Desmodium heterocarpum* (Linn.) DC.  
*D. polycarpum* DC. var. *trichocaulon* Baker  
Undershrub with purple fls., common.  
Biral, 850 m, 26-10-1972, *Vivekananthan* 43075.
- D. botorium* (Houtt.) Merr.  
*D. gyrans* DC.  
Undershrub with pinkish fls. & frs., common.  
Benne, 1200 m, November 1886, *Gamble* 18405  
& 21-1-1961, *Shetty* 11956; Biral, 850 m, 26-10-  
1972, *Vivekananthan* 43074.
- D. velutinum* (Willd.) DC.  
*D. latifolium* DC.  
Undershrub with fls. & frs., very common.  
Benne, 1200 m, November 1886, *Gamble* 18420;  
Moyar bank, 525 m, 23-11-1971, *Rathakrishnan*  
38991; Theppakadu, 850 m, 25-10-1972, *Vivekan-*  
*anthan* 43053.
- D. ormocarpoides* DC.  
Undershrub with pinkish fls., occasional.  
Biral 850 m, 26-10-1972, *Vivekananthan* 43072.
- D. pulchellum* (Linn.) Benth.  
Shrub with pale yellow fls. & frs., very common.  
Benne, 1125 m, 21-1-1961, *Shetty* 11955; Theppa-  
kadu, 850 m, 25-10-1972, *Vivekananthan* 43052.
- D. triangulare* (Retz.) Merr.  
*D. cephalotes* Wall. var. *congestum* Prain  
Shrub with white fls. & frs., common.  
Benne, 1000 m, 19-7-1960, *Subramanyam* 10481;  
Northern Hay R.F., 1000 m, 16-8-1970, *Sharma*  
35545; Theppakadu, 850 m, 25-10-1972, *Vivekan-*  
*anthan* 43063.
- Dunbaria ferruginea* Wt. & Arn.  
Climber with yellow fls., occasional.  
Moyar R.F., 525 m, 23-11-1971, *Rathakrishnan*  
38984.
- Erythrina suberosa* Roxb.  
Tree with scarlet fls., occasional.  
Mudumalai, 1100 m, *Beddome* s.n. (MH 15875).
- Flemingia strobilifera* R. Br. ex Ait.  
Shrub with white fls., common.  
Benne, 1200 m, 21-1-1960, *Shetty* 11949.
- F. wightiana* Grah.  
Shrub in frs., common.  
Benne, 1125 m, 19-1-1961, *Shetty* 11930.
- Glycine javanica* Linn.  
Climber with red fls. & frs., common.  
Theppakadu, 850 m, November 1884, *Gamble*

FLORA OF MUDUMALAI SANCTUARY

15664; Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38926.

*Indigofera cassioides* Rottl. ex DC.

*I. pulchella* Roxb.

Shrub with purple fls. & frs., common.

Thorapalli-Kargudi, 850 m, 26-10-1972, *Vivekananthan* 43086.

*I. cordifolia* Heyne ex Roth

Herb with red fls. & frs., common.

Moyar bank, 525 m, 23-11-1971, *Rathakrishnan* 38995.

*I. hirsuta* Linn.

Herb with red fls. & frs., common.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35598.

*I. parviflora* Heyne ex Wt. & Arn.

Herb with lilac fls., common.

Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38923.

*I. spicata* Forsk.

*I. endecaphylla* Jacq.

Trailing herb with red fls. & frs., common.

Benne, 1000 m, 19-7-1960, *Subramanyam* 10468;

Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35520.

*I. trita* Linn. f. ssp. *subulata* (Vahl ex Poir.) Ali

*I. subulata* Vahl

Undershrub with red fls., common.

Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38928.

*I. vestita* Baker

Undershrub in frs., common.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35580.

*I. wightii* Grah. ex Wt. & Arn.

Shrub with yellowish-red fls. & frs., common.

Mudumalai, 1100 m, 20-7-1960, *Subramanyam*

10496; Doddagatti, 900 m, 23-6-1970, *Shetty* 34357.

*Pterocarpus marsupium* Roxb.

Large tree with yellow fls. & frs., common.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35548.

*Rhynchosia albiflora* (Sims) Alston

*R. cyanosperma* Benth.

Climber in fls., common.

Theppakadu, 850 m, November 1884, *Gamble* 15665; Mudumalai, 1100 m, 27-10-1972, *Vivekananthan* 43093.

*R. densiflora* (Roth) DC.

Twiner with yellow fls., common.

Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38922.

*R. minima* (Linn.) DC.

Trailing herb with yellow fls., very common.

Mudumalai, 900 m, 24-6-1970, *Shetty* 34390.

*R. rothii* Benth. ex Aitch.

*P. sericea* Span.

Climbing shrub with purple fls., scarce.

Theppakadu, 850 m, November 1884, *Gamble* 15662.

*R. rufescens* DC.

Twining herb with yellow fls., common.

Masinagudi, 1000 m, November 1884, *Gamble* 15661; Theppakadu, 850 m, November 1886, *Gamble* 18443; Benne 1200 m, 21-1-1961, *Shetty* 11958; Bokkapuram R.F., 1000 m, 13-8-1971, *Sharma* 35439.

*Smithia geminiflora* Roth

Herb with yellow fls., common.

Benne, 1125 m, 21-1-1961, *Shetty* 11946.

*Sophora glauca* Lesch.

Shrub with purple fls., occasional.

Kargudi, 950 m, 12-4-1972, *Vivekananthan* 40804.

*Tephrosia purpurea* (Linn.) Pers.

Herb with pink or white fls. & frs., common.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35554; Masinagudi, 950 m, 19-8-1970, *Sharma* 35615.

*T. tinctoria* Pers.

Undershrub with pink fls., common.

Moyar R.F., 900 m, 19-8-1970, *Sharma* 35588.

*Uraria hamosa* Wall. ex Wt.

Straggling shrub with pink fls., common.

Benne, 1050 m, November 1886, *Gamble* 18424.

*U. lagopodioides* Desv. ex DC.

Undershrub with pink fls., occasional.

Mudumalai, 1100 m, *Beddome* s.n. (MH 14804); Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35539.

*Vigna radiata* (Linn.) Witzcek. var. *sublobata* (Roxb.) Verdc. *Phaseolus sublobatus* Roxb.

Twining herb with yellow fls. & frs., occasional.

Northern Hay R.F., 950 m, 16-8-1970, *Sharma* 35527.

CAESALPINIACEAE

*Piliostigma malabaricum* (Roxb.) Benth. *Bauhinia malabarica* Roxb.

Tree with yellow fls., common.

Mudumalai, 1100 m, August 1886, *Gamble* 17933 & 20-7-1960, *Subramanyam* 10483.

*P. racemosa* (Lamk.) Benth. *Bauhinia racemosa* Lamk.

Tree with yellow fls., common.

Bokkapuram R.F., 925 m, 17-4-1971, *Rathakrishnan* 37981; Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40746 & 25-10-1972, *Vivekananthan* 43059.

*Caesalpinia mimosoides* Lamk.

Climbing shrub with yellow fls. & frs., common.

Benne, 1125 m, November 1886, *Gamble* 18422 & 21-1-1961, *Shetty* 11938.

*Cassia auriculata* Linn.

Shrub with yellow fls., common.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35551.

*C. fistula* Linn.

Small tree with yellow fls., common.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35557; Kargudi, 950 m, 12-4-1972, *Vivekananthan* 40800.

*C. hirsuta* Linn.

Shrub with yellow fls. & frs., common.

Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35423.

\**C. intermedia* Sharma, Vivek. & Rathak. in Proc. Ind. Acad. Sci. (sec. B) 80:301.1975.

Shrub with yellow fls. & frs.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35602; Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40758.

*C. mimosoides* Linn.

Herb with yellow fls., common.

Northern Hay R.F., 950 m, 16-8-1970, *Sharma* 35523.

*C. sophora* Linn.

Undershrub with yellow fls. & frs., common.

Mudumalai 1100 m, 20-7-1960, *Subramanyam* 10484; Kargudi, 975 m, 28-10-1972, *Vivekananthan* 43102.

*C. tora* Linn.

Undershrub in frs., common.

Theppakadu, 850 m, November 1886, *Gamble* 18441.

#### MIMOSACEAE

*Acacia canescens* Grah.

Scandent shrub with yellow fls. & frs., common.

Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma*

35400; Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38911.

*A. chundra* Willd.

*A. sundra* DC.

Small tree with pale yellow fls., common.

Bokkapuram R.F., 1000 m, 13-8-1970, *Sharma* 35433; Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38910.

*A. leucophloea* Willd.

Tree in yellow flower heads, rare.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35553.

*A. torta* (Roxb.) Craib

Climbing shrub with white flower heads, occasional.

Kargudi, 1000 m, 24-6-1970, *Shetty* 34397; Northern Hay R.F., 950 m, 16-8-1970, *Sharma* 35529.

*Albizzia amara* Boivin.

Small tree with yellowish flower heads, occasional.

Avarihalla R.F., 900 m, 20-2-1972, *Sharma* 39865.

*A. lebbek* (Linn.) Benth.

Large tree with white flower heads, common.

Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40772.

*Mimosa pudica* Linn.

Undershrub with pinkish flower heads, rare.

Avarihalla R.F., 950 m, 19-8-1970, *Sharma* 35618.

#### COMBRETACEAE

*Anogeissus latifolia* (Roxb.) Bedd.

Medium-sized tree with yellow fls. & frs., very common.

Mudumalai, 1100 m, 23-9-1928, *Narayana & Raju* 18314; Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35535; Theppakadu, 850 m, 25-10-1972, *Vivekananthan* 43070.

*Combretum ovalifolium* Roxb.

Climbing shrub with pale green fls., common.

Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37982 & 16-2-1972, *Sharma* 39807.

*Terminalia arjuna* (Roxb. ex DC.) Wt. & Arn.

Large tree with yellow fls. on river banks, rare.

Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37958.

*T. bellerica* Roxb.

Tree with greenish yellow fls., rare.

Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40774.

FLORA OF MUDUMALAI SANCTUARY

*T. chebula* Retz.

Small tree with pale green fls., common.  
Bokkapuram R.F., 925 m, 17-4-1971, *Rathakrishnan* 37928.

*T. coriacea* (Roxb.) Wt. & Arn.

Tree in fls., rare.  
Mudumalai, 900 m, 11-4-1972, *Vivekananthan* 40791.

*T. crenulata* Roth

Tree in fls. & frs., common.  
Benne R.F., 875 m, 27-6-1970, *Shetty* 34427;  
Northern Hay R.F., 15-8-1970, *Sharma* 35503; Bir-  
ala-Thorapalli, 850 m, 26-10-1972, *Vivekananthan*  
43079.

*T. paniculata* Roth

Tree in fls., rare.  
Doddagati, 900 m, 23-6-1970, *Shetty* 34360.

*T. tomentosa* Wt. & Arn.

Tree with yellow fls. & frs., occasional.  
Kargudi-Mudumalai, 850 m, 23-9-1928, *Narayana*  
& *Raju* 18313; Mudumalai, 900 m, 11-4-1972, *Vive-*  
*kananthan* 40793.

MYRTACEAE

*Psidium guajava* Linn.

Small cultivated tree in frs., occasional.  
Benne R.F., 850 m, 27-6-1970, *Shetty* 34432 &  
10-4-1972, *Vivekananthan* 40767.

*Syzygium cumini* (Linn.) Skeels

Tree with pale yellow fls., common.  
Bokkapuram R.F., 925 m, 17-4-1971, *Rathakrish-*  
*nan* 37925; Theppakadu, 850 m, 9-4-1972, *Vivekan-*  
*anthan* 40744.

MELASTOMATACEAE

*Memecylon edule* Roxb.

Small tree in frs., rare.  
Moyar bank, 550 m, 19-4-1971, *Rathakrishnan*  
37979.

*Osbeckia wynaadensis* C.B. Cl.

Undershrub with purple fls. & frs., occasional.  
Benne, 1125 m, 21-1-1961, *Shetty* 11944 & 11-4-  
1972, *Vivekananthan* 40779.

*Sonerila tenera* Royle

Very small herb with pink fls., rare.  
Mudumalai, 1100 m, *Beddome* s.n. (MH 21380).

LYTHRACEAE

*Lagerstroemia parviflora* Roxb.

Tree with white fls., common.  
Moyar R.F., 900 m, 18-8-1970, *Sharma* 35603;  
Mudumalai, 900 m, 11-4-1972, *Vivekananthan* 40788.

*Rotala indica* (Willd.) Kochne

Herb with pale pink fls. & frs., common.  
Benne, 1125 m, 21-1-1961, *Shetty* 11961.

ONAGRACEAE

*Ludwigia hyssopifolia* (G. Don) Exell

*Jussiaea linifolia* Vahl  
Undershrub with yellow fls. & frs., common.  
Benne, 1000 m, 18-7-1960, *Subramanyam* 10450;  
Moyar R.F., 925 m, 24-11-1971, *Rathakrishnan*  
39007.

*L. peruviana* (Linn.) Hara

*Jussiaea speciosa* Ridley  
Undershrub with yellow fls. & frs., very common.  
Moyar bank, 525 m, 23-11-1971, *Rathakrishnan*  
38981; Theppakadu, 850 m, 24-6-1970, *Shetty* 34401  
& 9-4-1972, *Vivekananthan* 40752.

PASSIFLORACEAE

*Passiflora calcarata* Mast.

Climbing shrub with white fls. & frs., rare.  
Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma*  
35417.

CUCURBITACEAE

*Diplocyclos palmatus* (Linn.) C. Jeffrey

*Bryonopsis laciniosa* auct. non. Naud.  
Climber with yellow fls. & frs. very common.  
Moyar R.F., 900 m, 3-10-1956, *Balakrishnan* 168  
& 18-8-1970, *Sharma* 35609; Benne, 1125 m, 21-1-  
1961, *Shetty* 11947.

*Coccinia cordifolia* (Linn.) Cogn.

Climber with white fls., occasional.  
Avarihalla R.F., 900 m, 19-8-1970, *Sharma* 35613.

*Cucumis melo* Linn. var. *agrestis* Naud.

*C. pubescens* Wall.  
Climber in fls. & frs., rare.  
Theppakadu, 850 m, 25-10-1972, *Vivekananthan*  
43071.

*Trichosanthes bracteata* (Lamk.) Voigt. var.

*tomentosa* Heyne  
*T. palmata* Roxb. var. *tomentosa* C.B. Cl.  
Large climber with white fls. & frs., common.

Theppakadu, 850 m, 27-10-1972, Vivekananthan 43098.

CACTACEAE

*Opuntia dillenii* Haw.

Shrub with yellow fls., common.

Avarihalla R.F., 950 m, 19-8-1970, Sharma 35612.

AIZOACEAE

*Mollugo pentaphylla* Linn.

Herb with white fls., common.

Bokkapuram R.F., 110 m, 12-8-1970, Sharma 35408.

UMBELLIFERAE (APIACEAE)

*Pimpinella heyneana* Wall. ex Kurz

Herb with white fls., occasional.

Benne, 1000 m, 18-7-1960, Subramanyam 10457.

*P. monoica* Dalz.

Herb with white fls. & frs., common.

Theppakadu, 850 m, August 1886, Lawson s.n. (MH 23481); Doddagatti, 900 m, 23-6-1970, Shetty 34366; Northern Hay R.F., 950 m, 15-8-1970, Sharma 35512.

CAPRIFOLIACEAE

*Viburnum punctatum* Buch.-Ham. ex D. Don

*V. acuminatum* Wall.

Tree with white fls. & frs., occasional.

Benne R.F., 1230 m, 27-1-1961, Shetty 11948 & 27-6-1970, Shetty 34428.

RUBIACEAE

*Aidia candolleana* (Wt. & Arn.) Swamin.

*Randia candolleana* Wt. & Arn.

Small tree in frs., occasional.

Moyar R.F., 900 m, 17-8-1970, Sharma 35568.

*Borreria articularis* (Linn. f.) F.N. Will.

*B. hispida* K. Sch.

Procumbent herb with pale blue fls., occasional.

Moyar R.F., 900 m, 18-8-1970, Sharma 35579.

*B. ocymoides* (Burm. f.) DC.

Herb with pale blue fls., rare.

Benne, 1000 m, 18-7-1960, Subramanyam 10456.

*Canthium dicoccum* (Gaertn.) T. & B.

*Plectronia didyma* Kurz

Small tree with greenish fls., common.

Moyar bank, 550 m, 16-2-1972, Sharma 39808.

*C. parviflorum* Lamk.

*Plectronia parviflora* Bedd.

Shrub with white fls., very common.

Moyar R.F., 900 m, 17-8-1970, Sharma 35560 & 21-4-1971, Rathakrishnan 38023; Benne R.F., 875 m, 10-4-1972, Vivekananthan 40775.

*Exallage auricularia* (Linn.) Bremek.

*Oldenlandia auricularia* K. Schum.

Herb with white fls., very common.

Benne R.F., 1050 m, 16-7-1960, Subramanyam 10397; Doddagatti, 900 m, 23-6-1970, Shetty 37374.

*Gardenia gummifera* Linn. f.

Small tree in frs., occasional.

Doddagatti, 900 m, 23-6-1970, Shetty 34363.

*G. resinifera* Roth

*G. lucida* Roxb.

Small tree in frs., occasional.

Moyar bank, 550 m, 22-8-1970, Sharma 35727.

*Ixora arborea* Roxb. ex Sm.

*I. parviflora* Vahl

Small tree in frs., occasional.

Moyar bank, 550 m, 19-4-1971, Rathakrishnan 37970.

*Knoxia sumatrensis* (Retz.) DC.

*K. corymbosa* Willd.

Herb with purple fls., occasional.

Doddagatti, 900 m, 23-6-1970, Shetty 34369.

*Mitragyna parvifolia* (Roxb.) Korth

Large tree with pale yellow fls., rare.

Theppakadu, 850 m, August 1886, Lawson s.n. (MH 24020); Kargudi, 950 m, 12-4-1972, Vivekananthan 40801.

*Morinda coreia* Buch.-Ham.

*M. tinctoria* Roxb.

Small tree with white, scented fls., occasional.

Moyar bank, 550 m, 19-4-1971, Rathakrishnan 37971.

*Neanotis indica* (DC.) Lewis

*Anotis leschenaultiana* Benth. & Hook. f.

Herb with purple fls., common.

Benne R.F., 1050 m, 16-7-1960, Subramanyam 10383.

*Oldenlandia affinis* (Roem. & Schult.) DC.

*O. dichotoma* Koen.

Herb with pale blue fls., common.

Moyar R.F., 900 m, 18-8-1970, Sharma 35586.

FLORA OF MUDUMALAI SANCTUARY

- O. pumila* (Linn. f.) DC.  
*O. crystallina* Roxb.  
 Prostrate herb with white fls., occasional.  
 Moyar R.F., 900 m, 18-8-1970, *Sharma* 35595.
- O. umbellata* Linn.  
 Herb with lilac fls. and frs., common.  
 Mudumalai, 825 m, 24-6-1970, *Shetty* 34403.
- Ophiorrhiza mungos* Linn.  
 Undershrub with white fls. & frs., common.  
 Benne, 1000 m, 18-7-1960, *Subramanyam* 10440.
- Pavetta indica* Linn.  
 Large shrub with white fls., common.  
 Bokkapuram R.F., 925 m, 17-4-1971, *Rathakrishnan* 37926.
- P. tomentosa* Roxb. ex Sm.  
*P. indica* Linn. var. *tomentosa* (Roxb. ex Sm.)  
 Hook. f.  
 Shrub in frs., occasional.  
 Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35543.
- Rubia cordifolia* Linn.  
 Climber with white fls., common.  
 Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35380.
- Tarenna asiatica* (Linn.) O. Ktze. ex K. Schum.  
*Chomelia asiatica* O. Kuntze  
 Shrub in frs., common.  
 Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35392.
- Xeromphis malabarica* (Lamk.) Raju  
*Randia malabarica* Lamk.  
 Shrub in frs., occasional.  
 Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35419.
- X. spinosa* (Thunb.) Keay  
*Randia brandisii* Gamble  
 Shrub with white fls. & frs., very common.  
 Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35379; Thorapalli, 850 m, 26-10-1972, *Vivekananthan* 43084.
- COMPOSITAE (ASTERACEAE)
- Acanthospermum hispidum* DC.  
 Herb with yellow fls. & frs., occasional.  
 Kalhatti-Masinagudi, 1150 m, 23-8-1970, *Sharma* 35734.
- Bidens biternata* (Lour.) Merr. & Sheriff  
*B. pilosa* auct. non Linn.  
 Herb with yellow fls., occasional.  
 Bokkapuram R.F., 1250 m, 14-8-1970, *Sharma* 35461.
- Blainvillea acmella* (Linn.) Philip.  
*B. rhomboidea* Cass.  
 Herb with white fls., rare.  
 Moyar R.F., 900 m, 18-8-1970, *Sharma* 35594.
- Blepharispermum subsessile* DC.  
 Shrub in fls., rare.  
 Masinagudi, 1000 m, August 1886, *Lawson* s.n. (MH 27761); Moyar R.F., 900 m, 18-8-1970, *Sharma* 35600.
- Blumea lacera* (Burm. f.) DC.  
 Herb with yellow fls., common.  
 Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40759.
- B. mollis* (D. Don) Merr.  
*B. wightiana* DC.  
 Herb in fls., common.  
 Benne, 1125 m, 19-1-1961, *Shetty* 11931.
- Centratherum anthelminticum* (Linn.) O. Kuntze  
 Herb with purple fls., rare.  
 Masinagudi, 1000 m, November 1886, *Gamble* 18470.
- Conyza leucantha* (D. Don) Ludlow & Raven  
*C. viscidula* Wall.  
 Herb with pink fls., common.  
 Benne-Devarshola, 1225 m, 21-1-1961, *Shetty* 11942.
- Cosmos sulphureus* Cav.  
 Garden escape, with yellow fls.  
 Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35508.
- Dichrocephala integrifolia* (Linn. f.) O. Kuntze  
*D. latifolia* DC.  
 Herb with yellow fls., common.  
 Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10396.
- Emilia scabra* DC.  
 Herb with red fls., common.  
 Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10402.
- Laggera alata* (D. Don) Sch.-Bip.  
 Herb with purple fls., occasional.  
 Benne, 1125 m, 21-1-1960, *Shetty* 11952.
- Notonia grandiflora* DC.  
 Undershrub with pale-yellow fls., common.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35605;  
Moyar bank, 550 m, 16-2-1972, *Sharma* 39814.

*Senecio zeylanicus* DC.

Herb with yellow fls. & frs., common.

Benne, 1000 m, 19-7-1960, *Subramanyam* 10480.

*Spilanthes paniculata* Wall. ex DC.

*S. acmella* Murr.

Herb with yellow fls., common.

Benne-Devarshola, 1125 m, 21-1-1961, *Shetty* 11960.

*Synedrella nodiflora* Gaertn.

Herb with yellow fls., occasional.

Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35500.

*Vernonia albicans* DC.

Undershrub with pink fls., common.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35587.

*Xanthium strumarium* Linn.

Herb in frs., common.

Theppakkadu, 850 m, 9-4-1972, *Vivekananthan* 40747.

CAMPANULACEAE

*Lobelia heyneana* Roem. & Schult.

*L. trialata* Buch.-Ham. ex D. Don

Herb with pale blue fls. & frs., common.

Benne, 1000 m, 18-7-1960, *Subramanyam* 10455.

*L. nicotianaefolia* Heyne

Herb with white fls., common.

Benne-Devarshola, 1230 m, 21-1-1960, *Shetty* 11935.

PLUMBAGINACEAE

*Plumbago zeylanica* Linn.

Herb with white fls., occasional.

Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35418.

MYRSINACEAE

*Ardisia solanacea* (Poir.) Roxb.

Shrub with pink fls. & frs. occasional.

Doddagatti, 900 m, 23-6-1970, *Shetty* 34351; Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35420; Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40781.

*Embelia tsjeriam-cottam* (Roem. & Schult.) A. DC.

Shrub with pale green fls., occasional.

Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35989 & 17-4-1971, *Rathakrishnan* 37929.

SAPOTACEAE

*Madhuca indica* Gmel.

*Bassia latifolia* Roxb.

Large tree with cream-coloured fls. & frs., rare.

Moyar R.F., 925 m, 18-9-1971, *Rathakrishnan* 37956 & 15-2-1972, *Sharma* 39805.

*M. longifolia* (Linn.) Macbride

*Bassia longifolia* Linn.

Large tree with yellow fls., rare.

Moyar bank, 550 m, 16-2-1972, *Sharma* 39815.

*Manilkara roxburghiana* (Wt.) Dubard

*Minusops roxburghiana* Wt.

Large tree with white fls. & frs., occasional.

Bokkapuram R.F., 1000 m, 13-8-1970, *Sharma* 35443; Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37987.

*Mimusops elengi* Linn.

Medium-sized tree with white fls., common.

Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37987; Theppakkadu, 850 m, 9-4-1972, *Vivekananthan* 40753.

EBENACEAE

*Diospyros assimilis* Bedd.

Large tree with yellow fls., rare.

Moyar bank, 550 m, 16-2-1972, *Sharma* 39817.

*D. ebenum* Koen. ex Retz.

Small tree with yellow fls., common.

Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37980.

*D. montana* Roxb.

Small tree in frs., common.

Northern Hay R.F., 900 m, August 1886, *Gamble* 18066; Moyar dam, 900 m, 17-8-1970, *Sharma* 35576; Avarihalla R.F., 900 m, 20-11-1971, *Rathakrishnan* 38912.

*D. peregrina* (Gaertn.) Gurke

Tree on riverside with yellow fls. & frs., very common.

Moyar bank, 550, 22-8-1970, *Sharma* 35714 & 19-4-1971, *Rathakrishnan* 37957.

OLEACEAE

*Jasminum auriculatum* Vahl

Climbing shrub with white fls., common.

Masinagudi, 1000 m, November 1884, *Gamble* 15416; Moyar R.F., 900 m, 18-8-1970, *Sharma* 35604.



FLORA OF MUDUMALAI SANCTUARY

*J. malabaricum* Wt.

Climbing shrub with fragrant, white fls., occasional.

Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40766.

*J. rigidum* Zenk.

Climbing shrub in frs., common.

Avarihalla R.F., 950 m, 19-8-1970, *Sharma* 35619; Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37984.

*J. ritchiei* C.B. Cl.

Climbing shrub with white fls., common.

Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10399 & 27-6-1970, *Shetty* 34433.

*Ligustrum walkeri* Dcne.

Small tree with white fls. & frs. occasional.

Theppakadu, 850 m, November 1889, *Lawson* s.n. (MH 31220); Benne, 1200 m, 19-7-1960, *Subramanyam* 10467.

*Linociera malabarica* Wall. ex G. Don

Small tree with white fls. & frs., common.

Benne R.F., 875 m, 21-1-1960, *Shetty* 11950 & 10-4-1972, *Vivekananthan* 40768.

*Olea dioica* Roxb.

Tree with white fls. & frs., common.

Benne-Devarshola, 1300 m, 21-1-1961, *Shetty* 11936; Bokkapuram R.F., 925 m, 17-4-1971, *Rathakrishnan* 37927; Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40770.

*Schrebera swietenoides* Roxb.

Tree in frs., occasional.

Doddagatti, 900 m, 23-6-1970, *Shetty* 34365.

APOCYNACEAE

*Alstonia venenata* R. Br.

Shrub with white fls., occasional.

Mudumalai, 825 m, 24-6-1970, *Shetty* 34391.

*Carissa carandas* Linn.

Shrub with white or purple fls., common.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35713; Avarihalla R.F., 925 m, 21-4-1971, *Rathakrishnan* 38026.

*C. paucinervia* DC.

Shrub in frs., occasional.

Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35384.

*Chonemorpha fragrans* (Moon) Alston

*C. macrophylla* G. Don

Climber with white fls., rare.

Mudumalai, 1100 m, 1872, *Beddome* s.n. (MH 31926).

*Plumeria rubra* Linn.

*P. acutifolia* Poir.

Tree, fls. white tinged with yellow, cultivated.

Moyar R.F., 950 m, 19-4-1971, *Rathakrishnan* 37985.

*Rauwolfia serpentina* (Linn.) Benth. ex Kurz

Undershrub in frs., rare.

Benne, 1200 m, 19-7-1960, *Subramanyam* 10463.

*Wrightia tinctoria* R. Br.

Small tree with white fls. & frs., common.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35550 & 19-4-1971, *Rathakrishnan* 37986.

ASCLEPIADACEAE

*Asclepias curassavica* Linn.

Undershrub with red fls., occasional.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35724; Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40741.

*Caralluma adscendens* (Roxb.) Haw.

Fleshy herb, fls. yellow with pinkish streaks on the corolla lobes, rare.

Avarihalla R.F., 925 m, 21-4-1971, *Rathakrishnan* 38029.

*Ceropegia hirsuta* Wt. & Arn.

Climber, corolla greenish with pink dots, occasional.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35593.

*Cryptolepis buchmanii* Roem. & Schult.

Climber in frs., common.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35591; Theppakadu, 850 m, 27-10-1972, *Vivekananthan* 43096.

*Dregea volubilis* (Linn. f.) Benth. ex Hook. f.

*Marsdenia volubilis* T. Cooke

Climbing shrub with green fls. & frs., common.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35607.

*Gymnema sylvestre* (Retz.) R. Br. ex Roem. & Schult.

Climber in frs., common.

Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38929.

*Holostemma annulare* (Roxb.) K. Schum.

Climber with pink or white fls., occasional.

Masinagudi, 1000 m, August 1886, *Gamble* 18012.

*Pergularia daemia* (Forsk.) Choiv.

*P. extensa* N.E. Br.

Climber with yellow fls. & frs., common.

Masinagudi, 1000 m, November 1886, *Gamble* s.n. (MH 32406); Moyar R.F., 900 m, 18-8-1970, *Sharma* 35606.

*Sarcostemma brunonianum* Wt. & Arn.

Trailing leafless herb with yellow fls., occasional.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35559.

*Secamone emetica* R. Br.

Climber with yellow fls., occasional.

Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35401.

*Tylophora indica* (Burm. f.) Merr.

*T. asthmatica* Wt. & Arn.

Climber with yellow fls., occasional.

Moyar R.F., 925 m, 21-4-1971, *Rathakrishnan* 38021.

*T. pauciflora* Wt. & Arn.

Climber with yellow fls., occasional.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35710.

LOGANIACEAE

*Strychnos potatorum* Linn. f.

Small tree in frs., occasional.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35549.

GENTIANACEAE

*Canscora diffusa* R. Br.

Herb with pink fls., occasional.

Moyar bank, 550 m, 16-2-1972, *Sharma* 39822.

*Exacum bicolor* Roxb.

Herb, fls. white tinged with blue, rare.

Benne, 1000 m, 19-7-1960, *Subramanyam* 10478.

*Swertia angustifolia* Buch.-Ham. var. *pulchella*

Burkill

Herb with white fls., rare.

Theppakadu, 850 m, August 1886, *Lawson* s.n. (MH 33558).

BORAGINACEAE

*Carmona microphylla* (Lamk.) G. Don

*Ehretia microphylla* Lamk.

Shrub in frs., occasional.

Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38925.

*Cordia monoica* Roxb.

Tree in frs., common.

Masinagudi, 1000 m, November 1884, *Gamble* 15659; Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38917.

*C. obliqua* Willd. var. *tomentosa* (Wall.) Kozmi

*C. wallichii* G. Don

Tree in frs., common.

Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40757.

*Cynoglossum zeylanicum* (Vahl ex Honem) Thunb.

*C. furcatum* Wall.

Herb with blue fls. & frs., common.

Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10386; Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40748.

*Ehretia canarensis* Miq. ex Gamble

Small tree with greenish yellow fls., common.

Kalhatti-Masinagudi, 1150 m, 23-8-1970, *Sharma* 35732; Thorapalli-Kargudi, 850 m, 26-10-1972, *Vivekananthan* 43085.

*Trichodesma indicum* (Linn.) Lehm.

Herb with blue fls., occasional.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35601.

CONVOLVULACEAE

*Argyreia cuneata* (Willd.) Ker-Gawl.

Climbing shrub with purple fls. & frs., very common.

Mudumalai, 1100 m, August 1886, *Gamble* 17877; Benne, 1100 m, 19-7-1960, *Subramanyam* 10461; Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35428; Theppakadu, 850 m, 25-10-1972, *Vivekananthan* 43068.

*A. pomacea* (Roxb.) Choisy

Climber with purple fls., rare.

Masinagudi, 1100 m, August 1886, *Gamble* 18017.

*A. setosa* (Roxb.) Choisy

*Lettsomia setosa* Roxb.

Climber with pink fls., rare.

Theppakadu, 850 m, November 1886, *Gamble* 18466.

*Evolvulus alsinoides* (Linn.) Linn.

Prostrate herb with blue fls., common.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35583.

*Ipomoea alba* Linn.

*Calonyction bona-nox* Boj.

Climber with white fls., occasional.

Benne-Devarshola, 1225 m, 19-1-1961, *Shetty* 11941.

FLORA OF MUDUMALAI SANCTUARY

- I. hederifolia* Linn.  
*Quamoclit phoenicea* Choisy  
 Twiner with red fls., occasional.  
 Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35410.
- I. muricata* (Linn.) Jacq.  
*Calonyction muricatum* G. Don  
 Climber with pink fls. & frs., occasional.  
 Kargudi, 975 m, 29-10-1972, *Vivekananthan* 43105.
- I. staphylina* Roem. & Schult.  
 Climbing shrub, fls. white with purple shade on the corolla tube, occasional.  
 Masinagudi, 1000 m, November 1886, *Gamble* 20431.
- Lettsomia elliptica* Wt.  
 Climber with pink fls., common.  
 Bokkapuram R.F., 1250 m, 14-8-1970, *Sharma* 35460.
- Rivea ornata* Choisy  
 Climbing shrub with white fls., common.  
 Masinagudi, 1000 m, November 1889, *Lawson* s.n. (MH 34364); Moyar R.F., 900 m, 17-8-1970, *Sharma* 35573 & 24-11-1971, *Rathakrishnan* 39000.
- SOLANACEAE
- Datura metel* Linn.  
 Shrub with white fls., common.  
 Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35424.
- D. stramonium* Linn.  
 Undershrub with white fls. & frs., common.  
 Kalhatti-Masinagudi, 1150 m, 23-8-1970, *Sharma* 35745.
- Solanum giganteum* Jacq.  
 Large shrub with pink fls. & frs., common.  
 Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35499; Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40778.
- S. indicum* Linn.  
 Undershrub with blue fls., common.  
 Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35394; Theppakadu, 850 m, 25-10-1972, *Vivekananthan* 43057.
- S. melongena* Linn. var. *insanum* Prain  
 Shrub with pink fls., occasional.  
 Avarihalla R.F., 910 m, 20-11-1971, *Rathakrishnan* 38906.
- S. nigrum* Linn.  
 Herb with white fls. & frs., common.  
 Northern Hay R.F., 950 m, 16-8-1970, *Sharma* 35531.
- S. torvum* Sw.  
 Shrub with white fls. & frs., common.  
 Benne R.F., 875 m, 27-6-1970, *Shetty* 34426; Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35510.
- S. verbascifolium* Linn.  
 Large shrub with white fls. & frs., occasional.  
 Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35422.
- \* *S. viarum* Dunal  
 Shrub with white fls. & frs., common.  
 Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40749; Biralathorapalli, 850 m, 26-10-1972, *Vivekananthan* 43073.
- SCROPHULARIACEAE
- Artanema longifolia* (Linn.) Vatke  
*A. sesamoides* Benth.  
 Undershrub with purple fls. & frs., rare.  
 Benne, 1000 m, 18-7-1960, *Subramanyam* 10444.
- Lindernia antipoda* (Linn.) Alston  
*Ilysanthes veronicaefolia* Urban  
 Herb with pink fls., common.  
 Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10392.
- Scoparia dulcis* Linn.  
 Herb with white fls. & frs., common.  
 Benne, 1000 m, 18-7-1960, *Subramanyam* 10447; Theppakadu, 850 m, 24-6-1970, *Shetty* 34400; Moyar bank, 550 m, 22-8-1970, *Sharma* 35719.
- Sopubia delphinifolia* (Roxb.) G. Don  
 Herb with purple fls., occasional.  
 Moyar R.F., 925 m, 24-11-1971, *Rathakrishnan* 39003.
- Striga angustifolia* (D. Don) Sald.  
*S. euphrasioides* auct. non Benth.  
 Hemiparasitic herb with white fls., rare.  
 Moyar R.F., 925 m, 24-11-1971, *Rathakrishnan* 39002.
- S. lutea* Lour.  
 Hemiparasitic herb with yellow fls., rare.  
 Moyar R.F., 925 m, 24-11-1971, *Rathakrishnan* 39006.

BIGNONIACEAE

- Dolichandrone arcuata* C.B. Cl.  
Small tree in frs., rare.  
Moyar R.F., 900 m, 17-8-1970, *Sharma* 35575.
- Radermachera xylocarpa* (Roxb.) K. Schum.  
Tree with white fls. & frs., common.  
Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35534; Kargudi, 950 m, 12-4-1972, *Vivekananthan* 40797.
- Stereospermum angustifolium* Haines  
Small tree with purple fls. & frs., common.  
Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40776.
- S. personatum* (Hassk.) Chatterjee  
*S. tetragonum* DC.  
Tree in frs., occasional.  
Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35005.
- Tecoma stans* Juss.  
Small tree with yellow fls., cultivated.  
Benne-Devarshola, 1225 m, 21-1-1961, *Shetty* 11940.

ACANTHACEAE

- Andrographis serpyllifolia* (Vahl) Wt.  
Procumbent herb with yellow fls., very common.  
Theppakadu, 850 m, November 1884, *Gamble* 15414; Doddagatti, 900 m, 23-6-1970, *Shetty* 34364; Moyar R.F., 900 m, 18-8-1970, *Sharma* 35578 & 24-11-1971, *Rathakrishnan* 39004.
- Asystasia chelonoides* Nees var. *quadrangularis* C.B. Cl.  
Shrub with purple fls., occasional.  
Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35536.
- Barleria buxifolia* Linn.  
Small shrub with pink fls., common.  
Moyar R.F., 925 m, 21-4-1971, *Rathakrishnan* 38024 & 15-2-1972, *Sharma* 39802.
- B. mysorensis* Heyne  
Shrub in frs., occasional.  
Bokkapuram R.F., 1100 m, 13-8-1790, *Sharma* 35456.
- B. prionitis* Linn.  
Undershrub with orange-yellow fls., occasional.  
Moyar bank, 525 m, 23-11-1971, *Rathakrishnan* 38989.

- Crossandra infundibuliformis* (Linn.) Nees  
*C. undulaefolia* Salisb.  
Shrub with orange-yellow fls., rare.  
Moyar bank, 550 m, 16-2-1972, *Sharma* 39811.
- Dicliptera cuneata* Nees  
Herb with pink fls., common.  
Benne, 1125 m, 21-1-1960, *Shetty* 11951; Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma* 35451.
- Hygrophila salicifolia* (Vahl) Nees  
*H. angustifolia* auct. non R. Br.  
Herb in frs., rare.  
Benne, 1050 m, November 1884, *Gamble* 15609.
- Justicia betonica* Linn.  
Shrub with white fls., occasional.  
Benne, 1125 m, 21-1-1961, *Shetty* 11954.
- Lepidagathis hyalina* Nees  
Herb with white fls., occasional.  
Benne, 1140 m, 21-1-1961, *Shetty* 11943.
- Nilgirianthus heyneanus* (Nees) Bremek.  
*Strobilanthus heyneanus* Nees  
Shrub with pale blue fls., rare.  
Benne, 1050 m, November 1884, *Gamble* 15619.
- Peristrophe bicalyculata* (Retz.) Nees  
Herb with pink fls., occasional.  
Masinagudi, 1000 m, November 1886, *Gamble* 18455.
- Rostellularia diffusa* (Willd.) Nees var. *orbiculata* (Wall. ex T. Anders.) Ellis  
*Justicia orbiculata* Wall. ex T. Anders  
Herb with purple fls., occasional.  
Bokkapuram R.F., 1175 m, 14-8-1970, *Sharma* 35458.
- R. pumila* Nees  
*Justicia simplex* D. Don  
Herb with purple fls., very common.  
Benne, 1000 m, 19-7-1960, *Subramanyam* 10469; Kargudi-Doddagatti, 900 m, 23-6-1970, *Shetty* 34378; Theppakadu, 850 m, 25-10-1972, *Vivekananthan* 43062.
- Thunbergia fragrans* Roxb.  
Twiner with white fls., occasional.  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35377.
- T. fragrans* Roxb. var. *laevis* (Nees) C.B. Cl.  
Twiner with white fls. & frs., occasional.  
Benne R.F., 1050 m, 16-8-1960, *Subramanyam* 10400.

FLORA OF MUDUMALAI SANCTUARY

VERBENACEAE

- Callicarpa tomentosa* (Linn.) Murray  
*C. lanata* Linn.  
 Large shrub with purple fls., occasional.  
 Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40780.
- Clerodendrum serratum* Moon  
 Shrub with blue fls., common.  
 Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10393; *Doddagatti*, 900 m, 23-6-1970, *Shetty* 34367.
- C. viscosum* Vent.  
*C. infortunatum* auct. non Linn.  
 Large shrub with pinkish white fls. & frs., common.  
*Mudumalai-Gudalur*, 1100 m, 20-7-1960, *Subramanyam* 10482.
- Gmelina arborea* Roxb.  
 Tree with yellow fls., occasional.  
 Moyar R.F., 550 m, 16-2-1972, *Sharma* 39816.
- G. asiatica* Linn.  
 Shrub with yellow fls., occasional.  
*Avarihalla R.F.*, 950 m, 20-2-1972, *Sharma* 39867.
- Lantana indica* Roxb.  
 Shrub with purple fls., common.  
 Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10401.
- L. indica* Roxb. var. *albiflora* Wt. ex C.B. Cl.  
*L. wightiana* Wall.  
 Undershrub with white fls., occasional.  
 Moyar R.F., 925 m, 24-11-1971, *Rathakrishnan* 39001.
- Premna tomentosa* Willd.  
 Tree with greenish yellow fls. & frs., common.  
*Mudumalai*, 1100 m, 1873, *Beddome* s.n. (MH 39826); *Moyar R.F.*, 925 m, 21-4-1971, *Rathakrishnan* 38017; *Theppakadu*, 850 m, 9-4-1972, *Vivekananthan* 40755.
- Pygmaepremna herbacea* (Roxb.) Moldenke  
*Premna herbacea* Roxb.  
 Herb with white fls., common.  
*Mudumalai*, 1100 m, 1873, *Beddome* s.n. (MH 39870).
- Tectona grandis* Linn. f.  
 Tree in frs., common.  
*Masinagudi*, 1000 m, November 1886, *Gamble* 18435.

- Vitex altissima* Linn. f.  
 Tree, fls., white, tinged with blue and in frs., common.  
 Moyar bank, 550 m, 22-8-1970, *Sharma* 35725 & 19-4-1971, *Rathakrishnan* 37981.
- V. leucoxydon* Linn. f.  
 Tree with white fls., common.  
 Moyar bank, 550 m, 19-4-1971; *Rathakrishnan* 37983; *Theppakadu*, 850 m, 9-4-1972, *Vivekananthan* 40742.
- V. peduncularis* Wall. ex Schauer  
 Tree with white fls., common.  
*Kargudi*, 950 m, 12-4-1972, *Vivekananthan* 40805.

LABIATAE (LAMIACEAE)

- Anisomeles indica* (Linn.) O. Kuntze  
 Herb with purple fls., common.  
*Theppakadu*, 850 m, 25-10-1972, *Vivekananthan* 43064.
- Coleus forskohlii* (Poir.) Briq.  
*C. barbatus* Benth.  
 Herb with blue fls., occasional.  
*Bokkapuram R.F.*, 1100 m, 12-8-1970, *Sharma* 35414.
- Gomphostemma heyneanum* Wall. ex Benth.  
 Shrub with yellow fls., very common.  
 Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10384; *Northern Hay R.F.*, 950 m, 15-8-1970, *Sharma* 35501; *Thorapalli-Kargudi*, 850 m, 26-10-1972, *Vivekananthan* 43090.
- Leucas hirta* Spr.  
 Undershrub with white fls., very common.  
*Mudumalai*, 1100 m, 20-7-1960, *Subramanyam* 10485; *Doddagatti*, 900 m, 23-6-1970, *Shetty* 34361; *Avarihalla R.F.*, 950 m, 19-8-1970, *Sharma* 35616.
- L. lavandulaefolia* Rees  
 Herb with white fls., common.  
*Bokkapuram R.F.*, 1025 m, 12-8-1970, *Sharma* 35388; *Theppakadu*, 850 m, 25-10-1972, *Vivekananthan* 43065.
- L. marrubioides* Desf.  
 Herb with white fls., common.  
 Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10388; *Kargudi-Doddagatti*, 900 m, 23-6-1970, *Shetty* 34376.
- L. martinicensis* R. Br.  
 Herb with white fls., common.  
*Avarihalla R.F.*, 910 m, 20-11-1971, *Rathakrish-*

*nan* 38979; Kargudi, 975 m, 28-10-1972, *Vivekananthan* 43100.

*Ocimum americanum* Linn.

*O. canum* Sims.

Herb with white or purple fls., occasional.

Benne R.F., 950 m, 27-6-1970, *Shetty* 34424.

*Orthosiphon glabratus* Benth.

Herb with purple fls., occasional.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35570.

*O. rubicundus* Benth.

Herb with white fls., occasional.

Doddagatti, 900 m, 23-6-1970, *Shetty* 34370;

Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35538.

*O. viscosus* Benth.

Herb with pale purple fls., occasional.

Mudumalai, 1100 m, 20-7-1960, *Subramanyam* 10486; Moyar R.F., 925 m, 21-4-1971, *Rathakrishnan* 38019.

*Plectranthus incanus* Linn.

Herb with purple fls., common.

Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35504; Kargudi, 975 m, 29-10-1972, *Vivekananthan* 43103.

*Pogostemon auricularia* (Linn.) Massk.

*Dysophylla auricularia* Bl.

Herb with lilac fls., & frs., common.

Benne, 1000 m, 18-7-1960, *Subramanyam* 10446.

#### NYCTAGINACEAE

*Boerhaavia chinensis* (L.) Asch. & Sch.

Diffuse herb with pink fls. & frs., common.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35608; Moyar bank, 525 m, 23-11-1971, *Rathakrishnan* 38988.

#### AMARANTHACEAE

*Aerva lanata* (Linn.) Juss.

Undershrub with greenish-white fls., common.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35567.

*Allmania nodiflora* (Linn.) R. Br.

Herb with pink fls., occasional.

Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35407.

*Pupalia lappacea* (Linn.) Juss.

Slender herb with greenish yellow fls., occasional.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35708.

#### POLYGONACEAE

*Polygonum barbatum* Linn.

Herb with white fls., common.

Theppakadu, 825 m, 24-6-1970, *Shetty* 34394.

*P. glabrum* Willd.

Herb with pink fls., very common.

Avarihalla R.F., 950 m, 18-8-1970, *Sharma* 35617; Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37963; Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40745.

*P. hydropiper* Linn. var. *flaccidum* (Meissn.) Steud.

*P. flaccidum* Meissn.

Slender herb with pink fls., common.

Benne, 1000 m, 18-7-1960, *Subramanyam* 10443 & 27-6-1970, *Shetty* 34425; Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma* 35454.

#### PIPERACEAE

*Peperomia dindigulensis* Miq.

Small succulent herb with yellow fls., common.

Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35398 & 35426.

#### LAURACEAE

*Litsea deccanensis* Gamble

Small tree with greenish yellow fls., rare.

Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma* 35449.

*Persea gratissima* Gaertn.

Small cultivated tree in fls. & frs.

Benne, 1225 m, 21-1-1961, *Shetty* 11939.

#### LORANTHACEAE

*Dendrophthoe falcata* (Linn. f.) Etting.

*Loranthus longiflorus* Desv.

Hemiparasitic on *Tectona grandis* with scarlet fls., occasional.

Mudumalai, 1100 m, November 1889, *Gamble* 15660.

*Macrosolen parasiticus* (Linn.) Danser

*Elytranthe loniceroides* Engle

Hemiparasitic shrub on *Anogeissus latifolia* with red fls., common.

Kargudi, 1000 m, 24-6-1970, *Shetty* 34396; Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35540.

*Taxillus heyneanus* (Schult.) Danser

*Loranthus bracteatus* Wall.

Hemiparasitic shrub with pale green fls., occasional.

FLORA OF MUDUMALAI SANCTUARY

- Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37974.
- T. tomentosus* (Roth) Van Tiegh.  
*Loranthus tomentosus* Roth  
Hemiparasitic shrub, fls. greenish and rusty tomentose, occasional.  
Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35402.
- Viscum angulatum* Heyne ex DC.  
Leafless parasitic shrub in frs., occasional.  
Benne R.F., 850 m, 27-6-1970, *Shetty* 34430;  
Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35403.
- V. articulatum* Burm. f.  
Leafless parasitic shrub on *Albizia* sp. and *Zizyphus* sp. in frs., very common.  
Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma* 35437; Avarihalla R.f., 925 m, 21-4-1971, *Rathakrishnan* 38028.
- V. capitellatum* Sm.  
Hemiparasitic shrub on *Dendrophthoe falcata* which is again parasitic on *Dalbergia* sp. in frs., rare.  
Moyar bank, 550 m, 22-8-1970, *Sharma* 35712.
- V. heyneanum* DC.  
*V. verruculosum* Wt. & Arn. *V. orbiculatum* Wt.  
Hemiparasitic shrub on *Phyllanthus* sp. with yellow fls. & frs., occasional.  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35381.
- V. orientale* Willd.  
Hemiparasitic shrub on *Ficus tomentosa* in frs., occasional.  
Moyar R.F., 900 m, 17-8-1970, *Sharma* 35566.
- V. trilobatum* Talbot  
Hemiparasitic shrub on *Dendrophthoe trigona* which in turn grows on *Ficus tinctoria* ssp. *parasitica* with greenish fls. & frs., rare.  
Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35430.
- Moyar R.F., 900 m, 17-8-1970, *Sharma* 35572.
- A. indica* Linn.  
Herb with pale green fls., common.  
Avarihalla R.F., 950 m, 19-8-1970, *Sharma* 35614.
- A. racemosa* Heyne ex Baill.  
*A. paniculata* Miq.  
Undershrub with greenish yellow fls., occasional  
Bokkapuram R.F., 1175 m, 14-8-1970, *Sharma* 35457.
- Antidesma diadrum* Roth  
Shrub in frs., common.  
Mudumalai, 1100 m, August 1886, *Gamble* 17876; Doddagatti, 900 m, 23-6-1970, *Shetty* 34352; Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35542.
- Bridelia retusa* (Linn) Spr.  
Scandent shrub in frs., occasional.  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35380.
- B. roxburghiana* (Hook. f.) Gehrm.  
Tree in frs., occasional.  
Kargudi, 1000 m, 24-6-1970, *Shetty* 34399; Singara R.F., 1050 m, 18-4-1971, *Rathakrishnan* 37955.
- Croton oblongifolius* Roxb.  
Small tree with greenish yellow fls. & frs., rare.  
Kargudi, 950 m, 12-4-1972, *Vivekananthan* 40803.
- Drypetes roxburghii* (Wall.) Airy Shaw  
*Putranjiva roxburghii* Wall.  
Medium-sized tree in frs., common.  
Moyar bank, 550 m, 22-8-1970, *Sharma* 35711 & 23-11-1971, *Rathakrishnan* 38992.
- Euphorbia cristata* Heyne ex Roth  
Undershrub in fls., occasional.  
Mudumalai, 1100 m, 24-6-1970, *Shetty* 34380.
- E. hirta* Linn.  
Prostrate herb with greenish fls. & frs., common.  
Kalhatti-Masinagudi, 1150 m, 23-8-1970, *Sharma* 35747.
- E. hypericifolia* Linn.  
Herb with white fls. & frs., common.  
Mudumalai, 1100 m, 20-7-1960, *Subramanyam* 10499; Kalhatti-Masinagudi, 1150 m, 23-8-1970, *Sharma* 35735.
- E. nivulia* Buch.-Ham.  
Shrub in fls., occasional.  
Moyar bank, 550 m, 16-2-1972, *Sharma* 39809.

SANTALACEAE

- Santalum album* Linn.  
Small tree with red fls., common.  
Kargudi, 1000 m, 24-6-1970, *Shetty* 34395; Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35383.

EUPHORBIACEAE

- Acalypha fruticosa* Forsk.  
Shrub with pale green fls., occasional.

*Givotia rottleriformis* Griff.

Tree with yellow fls. & frs., very common.

Bokkapuram R.F., 1000 m, 13-8-1970, *Sharma* 35440; Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37973; Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40751; Mudumalai, 900 m, 11-4-1972, *Vivekananthan* 40794.

*Glochidion velutinum* Wt.

Small tree with yellow fls., occasional.

Benne, 1000 m, 19-7-1960, *Subramanyam* 10476.

*G. zeylanicum* A. Juss.

Small tree with yellow fls. & frs., occasional.

Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40754.

*Homonoia riparia* Lour.

Rheophytic shrub in frs., occasional.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35717.

*Jatropha heterophylla* Heyne ex Hook. f.

Shrub with greenish fls. & frs., occasional.

Theppakadu, 850 m, August 1886, *Gamble* 17981; Mudumalai, 825 m, 24-6-1970, *Shetty* 34404.

*Kirganelia reticulata* (Poir.) Baill.

Straggling shrub with yellow fls., occasional.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35718.

*Mallotus albus* Muell.-Arg. var. *occidentalis* Hook.f.

Tree in fls. & frs., occasional.

Devarshola-Benne, 1260 m, 21-1-1961, *Shetty* 11937.

*M. muricatus* (Wt.) Mueller

Small tree with pale green fls., occasional.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35730.

*M. philippensis* (Lamk.) Muell.-Arg.

Small tree with pale green fls., occasional.

Kalhatti-Masinagudi, 1150 m, 23-8-1970, *Sharma* 35731.

*Phyllanthus pinnatus* (Wt.) Webster

*Reidia floribunda* Wt.

Herb with red fls., rare.

Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35395.

*P. rheedii* Wt.

Herb with greenish fls., common.

Benne, 1000 m, 19-7-1960, *Subramanyam* 10473; Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35409.

*P. virgatus* Forst., f.

*P. simplex* Retz.

Herb in frs., occasional.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35599.

*Securinega leucopyrus* (Willd.) Muell.-Arg.

*Fluggea leucopyrus* Willd.

Straggling shrub with yellow frs., common.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35558.

*S. virosa* (Roxb. ex Willd.) Baillon

*Fluggea virosa* Baill.

Shrub with greenish yellow fls., common.

Benne R.F., 875 m, 10-4-1972, *Vivekananthan* 40771.

*Tragia involucrata* Linn.

Climbing herb with stinging bristles in frs., occasional.

Moyar bank, 550 m, 22-8-1970, *Sharma* 35721.

ULMACEAE

*Celtis cinnamomea* Lindl. ex Planch.

Small tree in frs., occasional.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35564.

MORACEAE

*Ficus bengalensis* Linn.

Tree in red syconia, occasional.

Bokkapuram, R.F., 1100 m, 13-8-1970, *Sharma* 35448.

*F. hispida* Linn. f.

Tree in yellow syconia, common.

Kargudi, 1000 m, 24-6-1970, *Shetty* 34398 & 12-4-1972 *Vivekananthan* 40795.

*F. macrocarpa*

*F. retusa* auct. non Linn.

Small tree in greenish syconia. Common.

Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37966; Theppakadu, 850 m, 9-4-1972, *Vivekananthan* 40763.

*F. racemosa* Linn.

*F. glomerata* Roxb.

Large tree in greenish syconia, occasional.

Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma* 35455.

*F. tomentosa* Roxb.

Tree in grey tomentose syconia, rare.

Moyar R.F., 900 m, 17-8-1970, *Sharma* 35556.

URTICACEAE

*Pouzolzia auriculata* Wt.

Erect herb with white fls., rare.

Bokkapuram R.F., 1175 m, 14-8-1970, *Sharma* 35459.



FLORA OF MUDUMALAI SANCTUARY

SALICACEAE

*Salix tetrasperma* Roxb.

Medium-sized tree near streams with yellow fls., rare.

Moyar bank, 525 m, 23-11-1971, *Rathakrishnan* 38998.

MONOCOTYLEDONS

ORCHIDACEAE

\* *Habenaria furcifera* Lindl.

Terrestrial herb with greenish fls., common.

Mudumalai, 1100 m, 23-9-1928, *Narayana & Raju* 18327; Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35513.

*H. plantaginea* Lindl.

Terrestrial herb with white fls., common.

Mudumalai, 1100 m, 23-9-1928, *Narayana & Raju* 18326 & 27-10-1972, *Vivekananthan* 43092; Moyar R.F., 925 m, 24-11-1971, *Rathakrishnan* 39005.

\* *Liparis prazeri* King & Pantl.

Terrestrial herb with greenish fls., rare.

Benne, 1000 m, 18-7-1960, *Subramanyam* 10460.

*Nervilia aragoana* Gaud.

Terrestrial herb with leaves (leaf appear after flowers), rare.

Birala-Thorapalli, 850 m, 26-10-1972, *Vivekananthan* 43089.

*Peristylus goodyeroides* (D. Don) Lindl.

Terrestrial herb with greenish yellow fls. & frs., very common.

Benne, 950 m, November 1884, *Gamble* 15607; Mudumalai, 1100 m, 20-7-1960, *Subramanyam* 10497 & 27-10-1972, *Vivekananthan* 43094.

\* *P. lawii* Wt.

Terrestrial herb with white fls., rare.

Doddagatti, 900 m, 23-6-1970, *Shetty* 34354.

*Polystachya flavescens* (Bl.) J.J. Sm.

*P. wightii* Reichb., *P. purpurea* Wt.

Epiphytic herb with brownish fls. & frs., common.

Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35514.

*Vanda testacea* (Lindl.) Reichb. f.

*V. parviflora* Lindl.

Epiphytic herb with yellow fls., common.

Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma* 35452; Moyar bank, 550 m, 19-4-1971, *Rathakrish-*

*nan* 37969; Kargudi, 875 m, 10-4-1972, *Vivekananthan* 40786.

ZINGIBERACEAE

*Costus speciosus* (Koen.) J.E. Sm.

Herb with white fls., common.

Benne, 1000 m, 18-7-1960, *Subramanyam* 10452.

*Globba bulbifera* Roxb.

Herb with orange-yellow fls., common.

Benne R.F., 1050 m, 16-7-1970, *Subramanyam* 10385; Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35502.

HYPOXIDACEAE

*Curculigo orchioides* Gaertn.

Herb with yellow fls., common.

Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10398; Doddagatti, 900 m, 23-6-1970, *Shetty* 34368; Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35431.

AGAVACEAE

*Furcraea foetida* (Linn.) Haw.

*F. gigantea* Vent.

Shrub with bulbils, common.

Bokkapuram R.F., 1100 m, 13-8-1970, *Sharma* 35453.

DIOSCOREACEAE

*Dioscorea bulbifera* Linn.

Climbing herb with greenish fls., occasional.

Thorapalli, 850 m, 26-10-1972, *Vivekananthan* 43082.

*D. hispida* Dennst.

Climbing herb in fls. & frs.

Mudumalai, 1100 m, 20-7-1960, *Subramanyam* 10488; Benne R.F., 950 m, 27-6-1970, *Shetty* 34421.

*D. oppositifolia* Linn.

Climbing herb with greenish fls., common.

Moyar R.F., 900 m, 18-8-1970, *Sharma* 35581; Kargudi, 850 m, 26-10-1972, *Vivekananthan* 43078.

*D. pentaphylla* Linn. var. *linnaei* Prain & Burkill

Climbing herb in buds, occasional.

Benne R.F., 950 m, 27-6-1970, *Shetty* 34423.

*D. tomentosa* Koen. ex Spreng.

Climbing herb with greenish yellow fls., common.

Benne R.F., 850 m, 27-6-1970, *Shetty* 34435; Northern Hay R.F., 950 m, 16-8-1970, *Sharma* 35528; Birala-Thorapalli, 850 m, 26-10-1972, *Vivekananthan* 43081.

SMILACACEAE

- Smilax perfoliata* Lour.  
*S. prolifera* Roxb.  
 Climbing shrub in frs., common.  
 Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35546.

LILIACEAE

- Asparagus racemosus* Willd.  
 Climbing undershrub with white fls. & frs., common.  
 Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35398.  
*Chlorophytum tuberosum* (Roxb.) Baker  
 Herb with white fls. & frs., common.  
 Mudumalai, 1100 m, 20-9-1960, *Subramanyam* 10489; Doddagatti, 900 m, 23-6-1970, *Shetty* 34372.  
*Gloriosa superba* Linn.  
 Climbing herb with red-yellow fls., occasional.  
 Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10395.

PONTEDERIACEAE

- Monochoria vaginalis* (Burm. f.) Presl  
 Herb in marshy places with blue fls. & frs., occasional.  
 Benne, 1000 m, 18-7-1960, *Subramanyam* 10445.

COMMELINACEAE

- Commelina undulata* R. Br.  
*C. kurzii* C.B. Cl.  
 Herb with blue fls., common.  
 Moyar R.F., 900 m, 18-8-1970, *Sharma* 35592;  
 Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35498.  
*Cyanotis cristata* (Linn.) D. Don  
 Herb with blue fls., very common.  
 Benne, 1000 m, 18-7-1960, *Subramanyam* 10453;  
 Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35432 & 14-8-1970, *Sharma* 35463.  
*Murdannia elata* (Vahl) Brueckn.  
*Aneilema lineolatum* Kunth  
 Herb with blue fls. & frs., occasional.  
 Benne R.F., 1050 m, 16-7-1960, *Shetty* 10382.  
*M. simplex* (Vahl) Brenan  
*Aneilema sinicum* Lindl.  
 Herb with blue fls. & frs., common.  
 Benne, 950 m, November 1884, *Gamble* 15676 & 18-7-1960, *Subramanyam* 10472.

- M. spirata* (Linn.) Brueckn.  
*Aneilema spiratum* R. Br.  
 Herb with blue fls. & frs., occasional.  
 Benne, 1000 m, 18-7-1960, *Subramanyam* 10454.  
*M. zeylanica* (C.B. Cl.) Brueckn. var. *longicapsa* (C.B. Cl.) Rolla Rao & Kammathy  
*Aneilema zeylanicum* C.B. Cl. var. *longicapsa* C.B. Cl.  
 Herb with white fls. & frs., common.  
 Moyar, 950 m, 3-10-1956, *Balakrishnan* 202;  
 Benne R.F., 1050 m, 16-7-1960, *Subramanyam* 10381.

ARACEAE

- Arisaema tortuosum* (Wall.) Schott  
 Herb, spathe greenish and spadix yellowish, rare.  
 Benne, R.F., 1050 m, 16-7-1960, *Subramanyam* 10390.  
*Colocasia esculenta* (Linn.) Schott  
*C. antiquorum* Schott  
 Herb, spathe pale yellowish, rare.  
 Benne, 1000 m, 18-7-1960, *Subramanyam* 10451.

ERIOCAULACEAE

- Eriocaulon quinquangulare* Linn.  
 Herb with white heads, rare.  
 Benne, 1125 m, 21-1-1960, *Shetty* 11953.

CYPERACEAE

- Carex speciosa* Kunth  
 Slender sedge, rare.  
 Theppakadu, 850 m, November 1889, *Lawson* s.n. (MH 53946).  
*Cyperus cyperinus* (Retz.) Valck.-Sur.  
*Mariscus cyperinus* Vahl  
 Erect sedge with short rhizome in brownish nuts, occasional.  
 Mudumalai, 850 m, 23-9-1928, *Narayana & Raju* 18315.  
*C. cyperioides* (Linn.) O. Ktze.  
*Mariscus sieberianus* Nees  
 Sedge with creeping rhizome in blackish nuts, common.  
 Benne, 1000 m, 18-7-1960, *Subramanyam* 10438.  
*C. distans* Linn. f.  
 Robust perennial sedge with stoloniferous rhizome in brownish nuts, common.  
 Benne R.F., 1050 m, 16-7-1970, *Subramanyam* 10388.

FLORA OF MUDUMALAI SANCTUARY

- C. dubius* Rottb.  
*Mariscus dubius* Kuenth. ex C.E.C. Fischer  
 Erect sedge with solitary head in blackish nuts, occasional.  
 Bokkapuram R.F., 1100 m, 12-8-1970, Sharma 35411.
- C. iria* Linn.  
 Sedge with triquetrous stem in blackish nuts, rare.  
 Theppakadu, 850 m, August 1886, Lawson s.n. (MH 53255).
- C. kyllingia* Endl.  
*Kyllingia monocephala* Rottb.  
 Sedge with elongated rhizome in damp places, nuts yellowish brown, common.  
 Benne, 1200 m, 19-7-1960, Subramanyam 10465; Theppakadu, 850 m, 25-10-1972, Vivekananthan 43058.
- C. melanospermus* (Nees) Valck.-Sur.  
*Kyllingia melanosperma* Nees  
 Sedge with horizontal rhizome in moist places, nuts blackish, common.  
 Bokkapuram R.F., 1100 m, 12-8-1970, Sharma 35425.
- C. paniceus* (Rottb.) Boeck.  
*Mariscus paniceus* Vahl  
 Erect sedge in pale brownish nuts, occasional.  
 Bokkapuram R.F., 1250 m, 14-8-1970, Sharma 35462.
- C. teneriffae* Poir.  
 Sedge in rock crevices, nuts dark brownish, rare.  
 Moyar dam, 900 m, 17-8-1970, Sharma 35563.
- C. tenuicalmis* Boeck.  
*C. zollingeri* auct. non Steud.  
 Sedge in moist places, occasional.  
 Benne, 1000 m, 18-7-1960, Subramanyam 10441.
- Fimbristylis complanata* (Retz.) Link  
 Sedge in moist places, nuts white, occasional.  
 Moyar R.F., 900 m, 17-8-1970, Sharma 35561.
- Scleria hebecarpa* Nees  
 Perennial sedge with woody rhizome in white or brownish nuts, common.  
 Benne, 1000 m, 1817-1960, Subramanyam 10459; Doddagatti, 900 m, 23-6-1970, Shetty 34350.
- GRAMINEAE (POACEAE)
- Alloteropsis cimicina* (Linn.) Stapf  
 Annual erect grass, rare.  
 Theppakadu, 850 m, August 1886, Lawson s.n. (MH 55182).
- Aristida depressa* Retz.  
 Annual grass, common.  
 Avarihalla R.F., 910 m, 20-11-1971, Rathakrishnan 38908.
- Arundinella leptochloa* (Nees ex Steud.) Hook. f.  
 Perennial grass, common.  
 Benne, 1000 m, 19-7-1960, Subramanyam 10479.
- Bothriochloa pertusa* (Linn.) A. Camus  
*Amphilophis pertusa* (Linn.) Nash ex Stapf  
 Perennial grass, common.  
 Avarihalla R.F., 910 m, 20-11-1971, Rathakrishnan 38913.
- Brachiaria eruciformis* (J. E. Sm.) Griseb.  
 Annual grass growing in tufts, rare.  
 Masinagudi, 1000 m, 12-5-1900, Barber 2599.
- B. ramosa* (Linn.) Stapf  
 Annual grass, rare.  
 Theppakadu, 850 m, November 1889, Lawson s.n. (MH 54764).
- Centotheca lappacea* (Linn.) Desv.  
 Perennial grass, rare.  
 Benne, 1000 m, November 1886, Gamble 18347.
- Chloris dolichostachya* Lagasca  
*C. incompleta* (Roth) Chiov.  
 Perennial tufted grass, very common.  
 Avarihalla R.F., 910 m, 20-11-1971, Rathakrishnan 38921.
- Chrysopogon aciculatus* (Retz.) Trin.  
 Perennial grass in open grasslands, common.  
 Benne, R.F., 850 m, 27-6-1970, Shetty 34429.
- C. zeylanicus* (Nees) Thw.  
 Large tufted grass, common.  
 Avarihalla R.F., 910 m, 20-11-1971, Rathakrishnan 38915.
- Cymbopogon flexuosus* (Nees ex Steud.) Wats.  
 Perennial grass (popularly known as lemon grass) in open grasslands, common.  
 Kargudi, 975 m, 29-10-1972, Vivekananthan 43109.
- C. nardus* (Linn.) Rendle  
 Probably the grass cultivated for its aromatic oil.  
 Mudumalai, 1100 m, Beddome s.n. (MH 88444).
- Cynodon arcuatus* J. S. Presl ex C.B. Presl  
*C. dactylon* Pers. var. *intermedius* C.E.C. Fischer  
 Perennial, creeping grass, common.

- Theppakadu, 850 m, November 1889, *Lawson* s.n. (MH 88727).
- Dactyloctenium aegyptium* (Linn.) P. Beauv.  
Erect or decumbent annual grass, rare.  
Masinagudi, 1000 m, November 1886, *Gamble* 18442.
- Digitaria ciliaris* (Retz.) Koel.  
*D. marginata* Link  
Erect or decumbent annual grass, very common.  
Benne, 1000 m, 18-7-1960, *Subramanyam* 10449;  
Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35519
- Eragrostiella bifaria* (Vahl) Bor  
*Eragrostis bifaria* Wt. ex Steud.  
Perennial, densely tufted grass, very common.  
Mudumalai, 900 m, 24-6-1970, *Shetty* 34383;  
Northern Hay R.F., 950 m, 16-8-1970, *Sharma* 35525.
- Eragrostis cilianensis* (All.) Vignolo-Lutati  
Annual, tufted grass, very common.  
Masinagudi, 1000 m, April 1900, *Barber* 2667;  
Kalhatti-Masinagudi, 1150 m, 23-8-1970, *Sharma* 35739.
- E. unioides* (Retz.) Nees ex Steud.  
Annual, tufted grass, common.  
Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35427.
- Hackelochloa granularis* (Linn.) O. Ktze.  
Annual grass, common.  
Mudumalai, 900 m, 24-6-1970, *Shetty* 34382.
- Heteropogon contortus* (Linn.) P. Beauv.  
Perennial gregarious grass in open grasslands, common.  
Kargudi, 975 m, 29-10-1972, *Vivekananthan*, 43104.
- Imperata cylindrica* (Linn.) P. Beauv. var. *major* (Nees) C.E. Hubb.  
*I. cylindrica* var. *koenigii* (Retz.) Dur. & Schinz.  
Perennial erect grass with creeping rhizome, very common.  
Mudumalai, 1100 m, 20-7-1960, *Subramanyam* 10498; Benne R.F., 950 m, 27-6-1970, *Shetty* 34422.
- Leptochloa obtusiflora* Hochst.  
Annual slender grass, rare.  
Masinagudi, 1000 m, May 1900, *Barber* 2556.
- Oryza meyeriana* (Zoll & Mor. ex Steud.) Baill. ssp. *granulata* (Nees & Arn. ex Watt) Tateoka.  
*O. meyeriana* Baill.  
Annual, slender grass in marshy places, rare.  
Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35511.
- Panicum notatum* Retz.  
*P. montanum* Roxb.  
Perennial grass, rare.  
Theppakadu, 850 m, November 1889, *Lawson* s.n. (MH 55042).
- Paspalidium flavidum* (Retz.) A. Camus  
Perennial grass, common.  
Mudumalai, 1100 m, 20-7-1960, *Subramanyam* 10496; Doddagatti, 900 m, 23-6-1970, *Shetty* 34348.
- Paspalum conjugatum* Berg.  
Annual, slender grass, common.  
Benne, 1200 m, 19-7-1960, *Subramanyam* 10464.
- P. scrobiculatum* Linn.  
Annual grass. The grain is used for food as a substitute of rice in some Southern districts.  
Masinagudi, 1000 m, 10-5-1900, *Barber* 2590.
- Pennisetum hohenackeri* Hochst. ex Steud.  
Perennial, densely tufted grass, rare.  
Masinagudi, 1000 m, September 1900, *Barber* 2615.
- Perotis indica* (Linn.) D. Ktze.  
Tufted grass, common.  
Northern Hay R.F., 950 m, 16-8-1970, *Sharma* 35526.
- Pogonatherum paniceum* (Lamk.) Hack.  
Slender grass, common.  
Moyar bank, 550 m, 19-4-1971, *Rathakrishnan* 37967.
- Setaria pallidifusca* (Schum.) Stapf et C.E. Hubb.  
Annual tufted grass, very common.  
Mudumalai, 900 m, 24-6-1970, *Shetty* 34379; Moyar R.F., 900 m, 18-8-1970, *Sharma* 35590.
- S. palmifolia* (Koen.) Stapf  
Perennial grass, common.  
Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35516.
- S. tomentosa* (Roxb.) Kunth  
*S. intermedia* Roem. & Schult.  
Annual grass, common.  
Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35494.
- S. verticillata* (Linn.) P. Beauv.  
Annual grass in shady and damp places, common.  
Kalhatti-Masinagudi, 1150 m, 23-8-1970, *Sharma* 35746.

FLORA OF MUDUMALAI SANCTUARY

*Sorghum halepense* (Linn.) Pers.  
Perennial grass near streams, common.  
Moyar bank, 525 m, 23-11-1971, *Rathakrishnan* 38987.

*S. nitidum* (Vahl) Pers.  
Tufted grass, rare.  
Mudumalai, 1100 m, 23-9-1928, *Narayana & Raju* 18324.

*Sporobolus fertilis* (Steud.) W. D. Clayton  
*S. indicus* acut. (non Linn.)  
Perennial grass, common.  
Mudumalai, 1100 m, *Beddome* s.n. (MH 88662);  
Benne, 1000 m, 19-7-1960, *Subramanyam* 10470.

*S. wallichii* Munro ex Trin.  
Erect grass, rare.  
Theppakadu, 850 m, November 1889, *Lawson* s.n. (MH 57399).

*Themeda cymbaria* Hack.  
Perennial robust grass, common.  
Mudumalai, 1100 m, 23-9-1928, *Narayana & Raju* 18323 & 20-7-1960, *Subramanyam* 10495.

*T. quadrivalvis* (Linn.) O. Ktze.  
Annual, robust grass in open grasslands; common.  
Kargudi, 975 m, 29-10-1972, *Vivekananthan* 43106.

*T. triandra* Forssk.  
Perennial, erect grass in grasslands, very common.  
Mudumalai, 1100 m, 23-9-1928, *Narayana & Raju* 18322 & 20-7-1960, *Subramanyam* 10491; Kargudi, 975 m, 29-10-1972, *Vivekananthan* 43108.

*Tragus biflorus* Schult.  
Perennial grass, common.  
Theppakadu, 850 m, August 1886, *Lawson* s.n. (MH 88644).

*Tripogon wightii* Hook. f.  
Slender grass, common.  
Masinagudi, 1000 m, April 1900, *Barber* 2653.

*Urochloa panicoides* P. Beauv.  
Annual grass, common.  
Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35518.

FERN S

OPHIOGLOSSACEAE

*Ophioglossum reticulatum* Linn.  
Small fern in humus soil or marshy places with sporangial spike, very common.

Moyar 950 m, 3-10-1956, *Balakrishnan* 204;  
Benne, 1200 m, 19-7-1960, *Subramanyam* 10462;  
Birala-Thorapalli, 850 m, 26-10-1972, *Vivekananthan* 43076.

SCHIZAEACEAE

*Lygodium flexuosum* (Linn.) Sw.  
Climbing fern in sporangia, common.  
Benne, 1000 m, 18-7-1960, *Subramanyam* 10458.

ADIANTACEAE

*Adiantum caudatum* Linn.  
Small tufted fern on rocky crevices in sori, common.  
Bokkapuram R.F., 1100 m, 12-8-1970, *Sharma* 35412.

*A. falcatum* Linn.  
Small fern in sori, rare.  
Moyar, 950 m, 3-10-1956, *Balakrishnan* 179.

*A. philippense* Linn.  
*A. lunulatum* Burm. f.  
Small tufted fern in marshy places, sori marginal.  
Doddagatti, 900 m, 23-6-1970, *Shetty* 34377; Northern Hay R.F., 950 m, 15-8-1970, *Sharma* 35506.

HEMIONITIDACEAE

*Hemionitis arifolia* (Burm. f.) Moore  
Small fern with hastate fronds in sori, rare.  
Bokkapuram R.F., 1250 m, 14-8-1970, *Sharma* 35464.

ACTINIOPTERIDACEAE

*Actiniopteris radiata* (Sw.) Link  
*A. dichotoma* Forsk.  
Small fern usually found on rocky crevices in marginal sori, very common.  
Moyar R.F., 900 m, 18-8-1970, *Sharma* 35610;  
Moyar bank, 600 m, 19-4-1971, *Rathakrishnan* 37972.

SINOPTERIDACEAE

*Cheilanthes mysurensis* Wall. ex. Hook.  
Small fern on rocky crevices in sori, common.  
Moyar bank, 550 m, 22-8-1970, *Sharma* 35726.

*Pellaea geraniaefolia* Fee  
*P. concolor* Lang. & Fischer  
Fern in moist or shady places in sori.  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma* 35393; Northern Hay R.F., 1000 m, 16-8-1970, *Sharma* 35532.

DAVALLIACEAE

- Nephrolepis cordifolia* (Linn.) Presl  
*N. tuberosa* (Bory ex Willd.) Presl  
Tufted fern in moist places, in sori.  
Benne, 1000 m, 19-7-1960, *Subramanyam* 10471.

ATHYRIACEAE

- Athyrium hohenackerianum* (Kunze) Moore  
Tufted fern, in sori, common.  
Benne, 1000 m, 18-7-1960, *Subramanyam* 10439.

THELYPTERIDACEAE

- Cyclosorus dentatus* (Forsk.) Ching  
*Nephrodium molle* Desv.  
Tufted fern with oblong-lanceolate fronds, in sori,  
common.  
Bokkapuram R.F., 1025 m, 12-8-1970, *Sharma*  
35396.

POLYPODIACEAE

- Drynaria quercifolia* Linn.  
Fern on rocky crevices or debris collected on  
tree-trunks, in sori, very common.  
Benne, 1200 m, 19-7-1960, *Subramanyam* 10466;  
Northern Hay R.F., 950 m, 15-8-1970, *Sharma*  
35507.  
*Microsorium membranaceum* (D. Don) Ching  
*Pleopeltis membranacea* Wall.  
Fern with short creeping rhizome, in sori, rare.  
Moyar, 950 m, 3-10-1956, *Balakrishnan* 193.  
*M. punctatum* (Linn.) Copel.  
*Pleopeltis irioides* Moore  
*P. punctata* (Linn.) Bedd.  
Fern with scarcely creeping rhizome, in sori,  
common.  
Benne R.F., 850 m, 27-6-1970, *Shetty* 34431.

REFERENCES

- BIR, S. S. & VASUDEVA, S. M. (1971): Pterido-  
phytic Flora of Kodaikanal. *J. Bombay nat. Hist.*  
*Soc.* 68(1):169-195.  
GAMBLE, J. S. & FISCHER, C. E. C. (1915-1936):  
The flora of the Presidency of Madras. London.  
HOLTUM, R. E. (1954): A Revised Flora of  
Malaya. Vol. II. Ferns of Malaya. Singapore.